A taxonomic revision of the Afrotropical species of *Zelotes* (Arachnida: Araneae: Gnaphosidae)

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Summary

This revision of the genus Zelotes from the Afrotropical Region provides keys, diagnoses, descriptions, illustrations, locality records and distribution maps for 100 species, including 56 new species. The following new synonyms are established: Zelotes simoni (Purcell), Z. montanus (Purcell) and Z. fuliginoides (Hewitt)=Z. fuligineus (Purcell); Z. salensis Berland and Z. elolensis Caporiacco=Z. laetus (O. P.-Cambridge); Z. impexus (Simon), Z. oneili (Purcell), Z. demonaicus Lawrence, Z. sidama Caporiacco, Setaphis bechuanica Purcell and S. anchoralis Purcell=Z. scrutatus (O. P.-Cambridge); Z. hewitti Tucker and Z. montivagus Tucker=Z. humilis (Purcell); Z. vespertilionis Tucker=Z. bastardi (Simon); Z. aculeatus (Purcell)=Z. invidus (Purcell); Z. ornatus Tucker=Z. lightfooti (Purcell); Z. bimamillatus (Caporiacco)=Z. mediocris (Kulczyński); Z. tristellus (Tullgren)=Z. guineanus (Simon); Z. cronwrighti (Purcell)=Z. gooldi (Purcell); Z. ungulus Tucker=Z. natalensis Tucker; Z. solitarius Lawrence=Z. radiatus Lawrence; Z. anchora Tucker=Z. reduncus (Purcell); Z. vryburgensis Tucker=Z. sclateri Tucker. Camillina aestus Tucker, C. arida (Purcell) and C. corrugata (Purcell) are transferred to Zelotes. Setaphis lightfooti Tucker is transferred to Zelotes, where the name is preoccupied=Z. otavi nom. nov. Males of the following species are described for the first time: Zelotes andreinii Reimoser, Z. comparilis (Simon), Z. frenchi Tucker, Z. lavus Tucker, Z. haplodrassoides (Denis), Z. sclateri, Z. reduncus, Z. radiatus, Z. broomi (Purcell), Z. aestus, Z. aridus and Z. tetramamillatus (Caporiacco). Females of Z. pallidipes Tucker and Z. otavi are described for the first time. It is proposed that Z. thomasi Caporiacco be transferred to Xerophaeus and Z. katangae Giltay to Aphantaulax. Zelotes pulchripes (Purcell) and Z. albomaculatus (O. P.-Cambridge) have been removed from Zelotes. The types of Z. abbajensis (Strand), Z. albobivittatus (Strand), Z. ascensionsis (Strand), Z. dalotensis (Strand), Z. dorsiscutatus (Strand), Z. madagascaricus (Strand), Z. multidentatus (Strand), Z. neumanni (Strand), Z. schoaensis (Strand) and Z. tullgreni Caporiacco are either juveniles or lost and are therefore regarded as nomina dubia.

Introduction

There is now a growing awareness of the threats to biodiversity and increased emphasis is being placed on the conservation of all species, not only the large vertebrates, and more conservationists are recognising the importance of the invertebrate component in the functioning of a healthy ecosystem (Dippenaar-Schoeman & Leroy, 2003). However, meaningful conservation cannot take place if the species involved are not known (Whitmore et al., 2001). Although the Araneae constitute an abundant and highly successful group of invertebrates, little is known about their taxonomy, biology and diversity. Only about 25% of the spider genera in the Afrotropical Region have been revised, diversity in most families is great, and the rate at which new species are being described is not levelling off (Alderweireldt & Jocqué, 1993). The fact that new families are still being found (e.g. Jocqué, 1994, 2001) indicates how much still needs to be done on the spider fauna of the Afrotropical Region (Dippenaar-Schoeman & Jocqué, 1997).

The family Gnaphosidae includes only those spiders with the anterior spinnerets bearing greatly enlarged and widened piriform gland spigots and with the posterior median eyes conspicuously flattened or irregular in shape (Platnick, 1990). The zelotine group of gnaphosids, a group of eight genera (Zelotes, Trachyzelotes, Urozelotes, Camillina, Setaphis, Drassyllus, Berinda and Zelominor), have specialised brush-like setae on metatarsi III and IV that are used for grooming (Platnick & Shadab, 1982).

The genus Zelotes is a highly speciose worldwide group and has been redescribed by Platnick & Shadab (1983) for the new world species, and their definition has been accepted and used by subsequent taxonomists (Grimm, 1985; Levy, 1998; Di Franco, 1992a). Over the past 110 years the descriptions of new Zelotes species from Africa have been scattered throughout the literature, and there has been little work done on the African species as a whole, except when Tucker (1923) revised those of southern Africa. Denis (1952) revised the Zelotes of Morocco, and Marinaro (1967) the Zelotes and related genera of Algeria. Both of these areas are outside the Afrotropical region. Revisions of most zelotine genera have been completed, with Platnick & Murphy (1987) and Platnick (1997) revising Camillina, Platnick & Murphy (1984) revising Trachyzelotes and Urozelotes, and Platnick & Murphy (1996) revising Setaphis. Many species were transferred from Zelotes into these genera and vice versa, leaving Zelotes much in need of revision. Zelotes is one of the largest genera of spiders in the Afrotropical Region, along with *Oxyopes* (86), Pardosa (76) and Hortipes (69) (Dippenaar-Schoeman & Jocqué, 1997; Bosselaers & Jocqué, 2000). Zelotes species are abundant and have been collected in pitfall traps in all arachnid surveys throughout the region, and are well represented in museum collections.

Material was received from the following institutions; abbreviations follow those of Arnett, Samuelson & Nishida (1993): AMNH=American Museum of Natural History, New York, USA (N. Platnick); BMNH= British Museum of Natural History, London, UK (P. Hillyard); BMSA=National Museum, Bloemfontein, South Africa (L. Lotz); CASC=California Academy of Sciences, San Francisco, USA (C. Griswold); DMSA= Durban Museum, Durban, South Africa (T. Crouch); HNHM=Natural History Museum, Budapest, Hungary (T. Szuts); ISNB=Institut Royal des Sciences Naturelles de Belgique, Brussels, Belgium (L. Baert); JM=John Murphy, private collection, Hampton, UK (J. Murphy); MCSN=Museo Civico di Storia Naturale "Giacomo Doria", Genova, Italy (G. Doria); MNHN=Museum National d'Histoire Naturelle, Paris, France (C. Rollard); MRAC=Musée Royal de l'Afrique Centrale, Tervuren, Belgium (R. Jocqué); MZRO=Museo Civico di Storia Naturale, Verona, Italy (R. Salmaso); MZUF=Museo Zoologico "La Specola", Firenze, Italy (S. Whitman); NMBZ=Natural History Museum,

Bulawayo, Zimbabwe; NMKE=National Museum of Kenya, Nairobi (C. Warui); NMSA=Natal Museum, Pietermaritzberg, South Africa (B. Lawrence); NREA= Naturhistoriska Riksmuseum, Stockholm, Sweden (T. Kronestedt); OXUM=University Museum, Oxford, UK (M. Atkinson); PPRI=National Collection of Arachnida and Insects, Plant Protection Research Institute, Pretoria, South Africa (A. Dippenaar-Schoeman); SAMC=South African Museum, Cape Town, South Africa (M. Cochrane); SMWN=State Museum Namibia, Windhoek, Namibia (E. Griffin); TMSA= Transvaal Museum, Pretoria, South Africa (P. Bayliss); ZMHB=Humboldt-Universität zu Berlin, Museum für Naturkunde, Berlin, Germany (J. Dunlop); ZMUC= Zoologisk Museum, Copenhagen University, Denmark (N. Scharff).

Zelotes Gistel, 1848

Melanophora C. L. Koch, 1833: part 120, pl. 20, 21 (type species by original designation Melanophora subterranea C. L. Koch); preoccupied by Melanophora Meigen, 1803 (Diptera).

Zelotes Gistel, 1848: xi (nomen novum for Melanophora C. L. Koch). Prosthesima L. Koch, 1872: 139 (superfluous nomen novum for Melanophora C. L. Koch).

Description: A full description and diagnosis of Zelotes has been given by Platnick & Shadab (1983) and has therefore not been included here. Important characters for Zelotes are eye arrangement, leg spination, and genital structures. Eves: Anterior medians (AME) circular, dark; posterior medians (PME) irregular, light; anterior laterals (ALE) and posterior laterals (PLE) oval, light. Two eye patterns occur: either eyes are small with AME usually smaller than other subequal eyes, separated by roughly their diameter, and by less than their radius from ALE; or eyes are relatively larger, closely grouped, with PME the largest (see Levy, 1998: figs. 33-36). Legs: Leg formula IV, I, II, III. Preening comb present on metatarsi III & IV. Typical leg spination pattern: Fe I, II d1-1-0, p0-0-1; III, IV d1-1-0, p0-1-1, r0-1-1; Pa III r0-1-0; Ti III p1-1-1, v2-2-2, r0-1-1; IV p1-1-1, v2-2-2, r1-1-1; Mt I, II v2-0-0; III p1-2-2, v2-2-0, r1-1-2; IV p1-2-2, v2-2-0, r1-2-2 (d=dorsal, p=prolateral, v=ventral, r=retrolateral). Genitalia: Abbreviations for genital structures are given by Platnick & Shadab (1983: figs. 2–5). The male palp has an intercalary sclerite, a simple ledge-shaped terminal apophysis (sometimes fused dorsally to the embolar base), a large embolar base (bearing projection and curved embolus), median apophysis and membranous conductor. No comparable synapomorphy has been found for females, and the epigynum is variable, often with a pair of blind paramedian ducts. Abbreviations (see Platnick & Shabab, 1983: figs. 2-5): Male palp: EB=embolar base; EMB=embolus; EP=embolar projection; IS=intercalary sclerite; MA=median apophysis; PEP=prolateral embolar projection; RTA=retrolateral tibial apophysis; TA=terminal apophysis. Female epigynum: AEM=anterior epigynal margin; LED=lateral epigynal duct; LEM=lateral epigynal margin; MED=

median epigynal duct; PED=paramedian epigynal duct; PEM=posterior epigynal margin; SP=spermathecae.

Misplaced species: Zelotes katangae Giltay, 1935 is tentatively transferred to Aphantaulax, and Zelotes thomasi Caporiacco, 1949 is transferred to Xerophaeus. Zelotes pulchripes (Purcell, 1908) is removed from Zelotes as it has no preening comb. Zelotes albomaculatus (O. P.-Cambridge, 1901) has been removed from Zelotes although the type cannot be traced. The illustrations in Cambridge (figs. 2, 2c) suggest that this species belongs to another genus, yet to be named, along with Purcell's (1908) and Tucker's (1923) Setaphis species. Setaphis lightfooti Tucker, 1923 is transferred to Zelotes=Z. otavi nom. nov. (Z. lightfooti is preoccupied).

Uncertain names: The type material of the following specific names has been lost or destroyed and the taxa are not recognisable from the original descriptions: Zelotes abbajensis (Strand, 1906), Z. albobivittatus (Strand, 1906), Z. ascensionis (Strand, 1909), Z. dalotensis (Strand, 1906), Z. dorsiscutatus (Strand, 1906), Z. madagascaricus (Strand, 1907), Z. multidentatus (Strand, 1906), Z. neumanni (Strand, 1906), Z. schoaensis (Strand, 1906) and Z. tullgreni Caporiacco, 1947. All these names are therefore regarded as nomina dubia.

Unavailable types: The Paris Museum, British Natural History Museum and Hope Entomology Collection have been unable to locate types of three species: Z. albomaculatus (O. P.-Cambridge, 1901), Z. mediocris (Kulczyński, 1901) and Z. setiger (L. Koch, 1875).

The format of the descriptions follows that of Platnick & Shadab (1983); all measurements are in mm, and only spination arrangements that differ from the typical arrangement for the genus are included.

Key to Afrotropical Zelotes species

Males

1.	Tibial apophysis short and flattened (Figs. 97-98)infumatus
	Tibial apophysis bifid (Figs. 211-212)bassari
	Tibial apophysis rounded with single tip (e.g. Fig. 3)2
2.	EMB originating proximally and prolaterally (Figs. 197, 201,
	283)
	EMB not as above
3.	Large conductive tissue present between TA and EMB (e.g.
	Fig. 197)4
	Conductive tissue not visible, EMB long, wrapping around
	cymbium (Figs. 283–284)rugege
4.	EMB very long, extending across palp (Figs. 197-198).natalensis
	EMB shorter, extending just beyond TA (Figs. 201-202)
	uquathus
5.	EMB with erect outgrowth near base (Figs. 90, 94)6
	EMB with no such outgrowth7
6.	Long thin EMB curving around cymbium (Fig. 94)nilicola
	EMB shorter and wide at base, cymbium cut away to accommo-
	date curved EMB (Fig. 90)ngomensis
7.	EB recessed behind TA, EMB originating distally and extending
	ventrally, MA facing retrolaterally (Figs. 21, 25, 31, 35, 81)8
	EMB as above but MA enlarged and facing ventrally (Figs. 43,
	49, 53, 55, 59, 63, 65, 67, 73)12
	EMB not as either of above17
8.	EMB short (Figs. 25, 35, 81)9
	EMB long and thin (Figs. 21, 32)11
9.	EMB twisted, MA enlarged and extension very long (Figs.
	81–82) <i>tragicus</i>
	EMB not twisted (Figs. 25, 35)10

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- 10. MA with prominent retrolateral hook-like extension (Figs. 25–26).....namibensis
- MA with small hook-like extension (Figs. 35–36).....scrutatus
 11. Palpal bulb elongated, TA sloping, MA shorter (Figs. 21–22).....
- Palpal bulb normal, TA truncated, MA longer (Figs. 31–32)
- 12. MA broad, situated mesally and proximal to TA, EMB thickened
- (Fig. 55).....capsula
 MA situated mesally but ensheathing EMB, TA broad flat sheet (Figs. 49–50).....resolution
- MA situated retrolaterally, EMB thin (Figs. 63, 65, 67, 73).....13
 13. EB with prolateral prong long and thin (Fig. 65)namaquus

- 43-44).....caldarius 17. EMB originating distally, short and curved, EB retrolateral
- 18. EB broad, no prolateral extension (Fig. 3).....fuligineus
- EB thinner, prolateral extension long and prong-like (Fig. 15).... tropicalis
- EMB and MA not as above.....21
- 20. EMB with small prong prolaterally (Figs. 109–110).....corrugatus
 EMB without prong, EMB short (Fig. 101).....aestus
- EMB without prong, EMB almost twice as long (Fig. 105)......
-aridus

- EMB very long (Fig. 117)zonognathus
- 23. EMB long and coiled more than 360° (Figs. 232, 288)24
- 24. EMB broad, originating prolaterally (Figs. 231–232).....*florisbad*
- EMB thin, originating retrolaterally (Figs. 287–288).....sclateri
 25. MA enlarged with long blade-like extension, EMB tip extending ventral to MA, prolateral embolar extension finger-like and
- extending beyond TA (Figs. 213–214)*brennanorum* — Without this combination of characters26

- TA narrow, not wrapping around MA (Figs. 205, 293)......28
- 28. MA normal, EB with retrolateral and prolateral prong-like extensions (Fig. 294).....singroboensis
 MA enlarged, EB with finger-like extension, EMB with large line bills extension at here (Fig. 205 206)
- knob-like extension at base (Figs. 205–206).....*bambari* 29. EMB tip broad (e.g. Figs. 127, 131, 265, 279)......30 — EMB tip thin (e.g. Figs. 169, 192, 196)......38

- EB visible on retrolateral side of TA (Figs. 137, 141)......35
- 33. EB with broad "winged" sheet prolaterally and bifid retrolateral extension, EMB tip bifid (Figs. 131-132)haroni 34. EB ridged and raised beyond TA without extensions, EMB a broad sheet-like structure (Fig. 279).....reduncus EB broad with broad prolateral and retrolateral extensions (Fig. 127).....bastardi 35. EMB a thin broad sheet visible behind EB (Figs. 141-142).....murphyorum EMB thickened and more prong-like, tip visible behind EB (Figs. 137–138).....ibayensis 36. TA very long, EB not visible beyond TA, EMB with median prong and bifid tip (Figs. 265-266)mulanjensis EB visible beyond truncated TA (Figs. 122, 261)37 37. EB with broad finger-like prolateral extension, tip of EMB winged (Figs. 261-262)matobensis EB with both a prong-like and sheet-like retrolateral extension. EMB curved at tip (Fig. 122)butarensis 38. EB visible beyond TA and twisted (Fig. 169)chinguli EB and extensions visible beyond TA (e.g. Figs. 192, 196, 237) .. EB not visible beyond TA except prolateral extensions (e.g. Figs. 157, 181, 233)......45 39. EMB with distal prong (Fig. 192).....guineanus EMB with distal winged flange (Fig. 196)kulempikus EMB without flange or prong40 40. EB flat, TA sinuous (Fig. 175)tuckeri EB and TA not as above......41 EB rounded, with beak-like retrolateral extension, EMB medium length (Figs. 237–238)gooldi EB rounded, wrapping around very short EMB (Figs. 77-78).....tenuis 42. EMB long, crossing ventral to EB (Figs. 251, 301)......43 EMB shorter and visible behind EB (Figs. 165, 221)......44 43. Base of EMB very broad, prolateral extension on EB ensheathing EMB (Fig. 302)vikela Prolateral extension on EB sheet-like, base of EMB narrower with hook-like extension (Figs. 251-252).....katombora 44. TA truncated, EB with beak-like prolateral and retrolateral extensions (Fig. 221).....comparilis TA longer, EB with prong-like bifid retrolateral extension, EMB tip thickened (Fig. 165)tendererus Prolateral extension short, prong-like (Fig. 181)mosioatunya 46 Prolateral extension long and finger-like (Figs. 157, 162, 233, MA with wing-like extension, EB prolateral extension long and 47. straight (Fig. 291).....shabae MA normal, EB prolateral extension variable48 48. Base of MA raised, TA sinuous, EMB thin (Figs. 233-234).frenchi Base of MA not raised, TA straight, EMB wider (Figs. 157-158)capensis Base of MA not raised, TA rounded, EMB very wide at base (Figs. 161–162).....lotzi 49. EMB with winged flange (Figs. 188, 244)50 MA enlarged, winged flange on EMB small, EMB tip straight 50. (Figs. 187-188)andreinii MA smaller, winged flange on EMB large, tip of EMB hooked (Figs. 243–244)haplodrassoides 51. Winged extension visible on EB (Figs. 210, 220)52 No winged extension on EB (Figs. 226, 269, 276)53 52. Winged extension small, EMB short (Figs. 209-210)banana Winged extension large, EMB very long (Fig. 220).....cassinensis 53. Retrolateral extension on EB an enlarged twisted outgrowth, TA large and ridged (Figs. 225-226)doddieburni Retrolateral extension smaller and hook-like, TA not ridged MA base enlarged and protruding well beyond TA, EMB very 54. long with distal half visible across distal end of palp and

ensheathed in groove in cymbium (Fig. 269).....nyathii

Females

1.	AEM fused into single hood (e.g. Fig. 33)2
_	AEM paired (e.g. Fig. 45)
—	AEM fused to PEM to make "V" shaped opening (Fig. 297)
2	AEM absent (Fig. 217)butembo
2.	Epigynal plate with median tongue-like swelling (Figs. 25, 27, 33 37)
_	55,57)
	103 111) 6
3.	Ducts enlarged into bulbs anteriorly (Figs. 24, 34)
	Ducts without bulbous structures anteriorly (Figs. 28, 38)
4.	Ventrally, coil of ducts visible anterior to spermathecae (Fig.
	33)pallidipes
	Ventrally, coil of ducts not visible (Fig.23)laetus
5.	MED coiled several times (Fig. 38)scrutatus
	MED extend into flat expansions (Fig. 28)namibensis
6.	Transverse ridges present posterior to AEM (Figs. 103, 107, 111)
	No transverse ridges posterior to AEM
/.	plate rounded (Fig. 111)
_	Median plate triangular ducts short with few coils (Figs 103–
	104) aestus
	LEM joining anteriorly, ducts long and highly coiled (Figs.
	107–108)aridus
8.	AEM straight (Fig. 29)ovambensis
	AEM curved (e.g. Figs. 19, 71)9
9.	LED wider than MED but not expanded into bulbs (Figs. 20,
	40)
	LED expanded into bulbs (e.g. Figs. 58, 72)11
10.	MED coiled, PEM indistinct, AEM close to posterior margin $(\overline{\Gamma} = 20, 40)$
	(Figs. 39–40)somaliensis
11	MED not colled, PEM distinct (Figs. 19–20)angolensis
· · · ·	PEM distinct (Figs. 51, 71, 87, 99)
12	LEM long and longitudinal with small oval orifice between (Fig
121	71)pedimaculosus
	Epigynum not as above (Figs. 57, 87, 99)13
13.	LEM long, strongly curved and wider posteriorly than anteriorly
	(Fig. 57)capsula
	LEM short and close to AEM (Figs. 87, 99)14
14.	AEM very small, shorter than width of LEM (Fig. 99)
	AFM ware land around LFM (Fig. 87)
15	LEM short and widely separated PEM long with rough edges
15.	(Fig 75) <i>tetramamillatus</i>
	LEM close together. PEM short. MED very thin and coiled. LED
	rounded (Figs. 61–62)humilis
_	LEM and PEM straight, MED wider, LED irregularly expanded
	(Figs. 69–70)otavi
16.	PEM indistinct, LEM transverse or slightly angled, close to AEM
	(e.g. Figs. 45, 47, 229)17
	PEM indistinct, LEM longitudinal (Figs. 115, 119, 133, 255)
	DEM distinct 25
17	MED extremely long and highly coiled (Fig. 48) cordigor
· /.	MED not highly coiled (e.g. Figs 46 230) 18
18.	LED expanded into large bulbs (Fig. 46)
_	LED not expanded into large bulbs (Figs. 84, 86, 230)
19.	AEM widely separated, PED distinct (Figs. 229-230)donnanae
	AEM closer together, PED indistinct (Figs. 83-86)20
20.	Spermathecae large (half length of epigynum), MED very short
	(Fig. 86)quipungo
	Spermathecae smaller (third length of epigynum), MED longer
21	(Fig. 04)
<u> </u>	LEW short close together (Figs 51 115 110) 23
	22 shore, erobe to gether (1.160, 51, 115, 117)

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22.	MED broad, LED short, narrow (Fig. 256)
	into large bulbs (Fig. 134)haroni
23.	MED narrow initially, broadened and looped anteriorly (Fig. 52)
	MED uniform thickness (Figs. 116, 120)24
24.	LED enormous bulbs (Fig. 116)lavus
—	LED expanded, sheet-like (Fig. 120)zonognathus
25.	Epigynal plate with median tongue-like swelling (Figs. 91, 95,
	267)
26	LEM close together close to AEM LED expanded into large
20.	bulbs MED distinct (Figs 95–96) <i>nilicola</i>
	LEM close together, AEM wider apart, LED expanded into large
	bulbs, MED indistinct (Figs. 91-92)ngomensis
	LEM wider apart, MED wide and sclerotised, LED enlarged but
27	not expanded into bulbs (Figs. 267–268)mulanjensis
27.	PEM reaching posteriorly considerably further at middle than sides (a.g. Figs. 17, 125, 171, 100, 245)
	PEM centrally straight or pointed to posterior margin (e.g. Figs.
	153, 167, 227)
28.	LEM and PEM straight, forming long "V" shaped groove (Figs.
	199, 203)
29	MED heavily sclerotised and relatively short not visible ventrally
2).	(Figs. 203–204)uquathus
	MED not sclerotised, long and convoluted, visible ventrally (Figs.
	199–200)natalensis
30.	Centrally displaced PEM initially close together, separating pos-
	Centrally displaced PEM very broad and rounded (Figs. 17.245
	249, 289)
	Centrally displaced PEM narrow and pointed (e.g. Figs. 135, 259,
21	273)
31.	LEM (Fig. 17)tropicalis
	Transverse grooves absent (Figs. 245, 249, 289)
32.	PEM very long, extending between spermathecae (Fig. 249)
	PEM shorter not reaching spermathecae (Figs 245 289) 33
33.	MED anteriorly expanded into large irregularly shaped bulbs,
	posterior coils clearly visible ventrally (Figs. 289-290)sclateri
	MED anteriorly expanded, but not bulbous (Fig. 246)
24	haplodrassoides
54.	LEM absent (Fig. 259)
35.	MED heavily sclerotised and fused together (Fig. 282)
	MED lightly sclerotised and separate (e.g. Figs. 136, 150)36
36.	MED long and coiled (Fig. 150)broomi
_	274. 278)
37.	MED straight (Figs. 254, 278)
	MED folded, looped or twisted, with or without anterior expan-
20	sions (Figs. 136, 174, 178, 242, 258, 274)
38.	MED wide, LEM about third length of epigynal plate (Fig. 278)
	MED anteriorly wider, LEM very long, more than half length of
	plate (Fig. 254)kumazomba
39.	PED elongated, on long stalks, posteriorly displaced (Figs. 174,
	178)
	FED not on long starks of elongated (Figs. 130, 242, 238, 274)
40.	Posterior section of MED wide, long, anterior sinuous expansions
	wider (Fig. 178)tuckeri
—	Posterior section of MED narrow, very short, anterior expansions
<i>/</i> 1	narrower (Fig. 1/4)mediocris
41.	into sinuous sheet-like enlargements (Fig. 274) awahargansis
	MED straight posteriorly or looped but not coiled (Figs. 136, 242,
	258)
42.	LED expanded into large bulbs (Fig. 136)mkomazi
	LED not widely expanded into builds (Figs. 242, 258)43

- PEM not anteriorly displaced, MED initially very short, enlarged anteriorly, without blind-ending extensions (Figs. 257–258)....... lichenvensis
- PEM not displaced anteriorly by LEM (e.g. Figs. 189, 235)....54
 45. PEM longer than width of spermathecae (Figs. 153, 167, 227,
- 155, 159, 163)......49 46. LEM very long, AEM widely separated (Fig. 153)......*lightfooti*
- LEM shorter, AEM closer together (Figs. 167, 227, 271)......47
- 47. LED fused into central plate, MED short and coiled (Fig. 228)
 doddieburni LED separate, MED longer with bulb-like enlargements (Figs.
- 48. MED long, divergent (Fig. 271)nyathiii
 MED short, straight (Fig. 167)tendererus
- 49. MED very short (Fig. 80)tenuis
- MED longer (Figs. 146, 152, 156, 160, 164).....50
- 50. LEM short, less than third length of epigynum (Figs. 159, 163).51
 LEM longer, more than half length of epigynum (Figs. 145, 151,
- MED without coil, LED very short, not fused (Fig. 164)lotzi
- 52. MED with blind-ending extensions (Fig. 156).....siyabonga
- MED without blind-ending extensions (Figs. 146, 152)......53
- MED uncoiled, gradually increasing in diameter (Fig. 152).invidus
 MED coiled, narrow initially with sharp increase in diameter

- (Fig. 189).....andreinii
 LEM not much more widely separated posteriorly than anteriorly

- PEM not straight (Figs. 1, 41)......60
 58. AEM widely separated, MED short, displaced dorsally into
- AEM where separated, MED short, displaced dorsally into enlargements (Figs. 215–216)brennanorum
 AEM closer together, MED longer (Figs. 193–194, 223–224) ..59
- MED initially thin and divergent, enlarged anteriorly and looped ventrally (Fig. 194)......guineanus
- MED initially straight, enlarged anteriorly but remaining in same plane (Fig. 224).....comparilis
- 60. LEM close together, MED long, thin and coiled (Figs. 41–42) ... soulouensis
- LEM further apart, MED folded (Figs. 1–2)......*fagei*61. MED fused centrally (Figs. 126, 140, 144)......62
- 62. Central plate very large and rounded (Figs. 139, 143)......63
 Central plate not as above (Figs. 123, 125, 285)......64
- 63. PEM indistinct centrally, no dark areas around MED (Figs. 139–140).....ibayensis
- PEM distinct centrally, rounded, dark areas around MED (Figs. 143–144).....murphyorum
- 64. LEM short, less than third length of epigynum (Fig. 125)......lubumbashi
 LEM longer, greater than half length of epigynum (Figs. 123,
- (Figs. 123–124).....butarensis — PEM rounded, MED angular, fused area pointed (Figs. 285–

- 101
- MED coiled or folded with bulb-like enlargements (e.g. Figs. 208, 67. MED initially divergent, wide and sclerotised, LED large and bulb-like (Fig. 130).....bastardi MED initially straight, narrower, not heavily sclerotised (e.g. 68. PED displaced on long stalk-like processes (Fig. 10).....mashonus PED not displaced on stalk-like processes (Figs. 6, 8, 12, 14)..69 MED short and straight (Figs. 6, 8).....70 69. MED slightly longer and winding (Figs. 12, 14).....71 LED expanded into large bulbs, spermathecae large (Fig. 8)...... 70. LED not expanded into large bulbs, spermathecae smaller (Fig. 6)fuligineus 71. LEM rounded (Fig. 11)....rothschildi LEM angular, MED longer (Figs. 13, 14).....subaeneus 72. LEM "S" shaped, MED coiled longitudinally (Figs. 207-208)bambari MED anteriorly with large blind-ending extensions (Figs. 248, 73. MED anteriorly enlarged, but without blind-ending extensions (Fig. 240).....75 74. MED posteriorly long, blind-ending extensions curved (Fig. 296).....singroboensis MED posteriorly shorter, blind-ending extensions straight (Fig. 248).....inqayi 75 MED enlargements displaced dorsal to posterior MED (Figs. 180, 184, 186, 264)......76 MED enlargements not displaced dorsal to posterior MED, PEM rounded (Figs. 239-240).....gooldi LED greatly enlarged and bulb-like, enlargements on MED 76. irregular (Fig. 186).....musapi LED not greatly enlarged (Figs. 180, 184, 264)77 77. LED very long (Fig. 264)mazumbai LED short (Figs. 180, 184)......78 78. MED enlargements irregularly shaped, spermathecae small (Fig. 184).....mosioatunya MED enlargements circular, spermathecae larger (Fig. 180)......jocquei

A cladogram was attempted for the 51 Zelotes species known from both males and females. Twenty parsimonious trees were found but all branches had zero support and unresolved trees indicating a high level of homoplasy and ambiguity, and as a result this analysis has been excluded from this paper. Owing to the ambiguous and unclear phylogenetic signal, the placing of species within groups is difficult. However, an attempt has been made to place them within groups, but it must be pointed out that the order is subjective and in many cases speculative, especially when only one sex is known.

The subterraneus group

Diagnosis: The *subterraneus* group was identified and described by Platnick & Shadab (1983) and also used by Levy (1998). This group contains those species with a more typical *Zelotes* genital morphology. Males have a very wide embolar base that extends across most of the width of the palpal bulb and bears an embolar projection, and a relatively short, distally originating embolus. Females have a rectangular epigynum outlined by paired anterior, lateral and relatively straight posterior margins, and the ducts are transversely arranged and occupy less than a third of the length of the epigynal plate.



Figs. 1–2: Zelotes fagei Denis, 1955. 1 Epigynum, ventral view; 2 Epigynum, dorsal view. Scale line=0.2 mm.

Zelotes fagei Denis, 1955 (Figs. 1–2, Map 1)

Zelotes fagei Denis, 1955: 110, fig. 8 (D^Q); Brignoli, 1983: 580; Levy, 1998: 115–116, figs. 42–43; Platnick, 2005.

Diagnosis: *Zelotes fagei* is closest to *Z. rothschildi* and *Z. subaeneus* but can be distinguished by the folded epigynal ducts (Fig. 2). Colour: black throughout.

Male: Unknown.

Female: Levy (1998) gives measurements. Epigynum (Figs. 1–2).

Material examined: NIGER: Téour, Air, 17–22 August 1947, 19 (holotype), MNHN AR1899.

Distribution: Niger (Map 1), Egypt and Sinai (Levy, 1998).

Zelotes fuligineus (Purcell, 1907) (Figs. 3-6, Map 2)

Melanophora fuliginea Purcell, 1907: 327–328, pl. 15, figs. 44–46 (D♂♀).

Melanophora simoni Purcell, 1907: 329, pl. 15, fig. 49 (D^Q). Syn. n.

Melanophora montana Purcell, 1907: 329, pl. 15, fig. 51 (D?). Syn. n.

Prosthesima montana Tullgren, 1910: 110, pl. 1, fig. 24.

Melanophora aculeata Purcell, 1908: 237, pl. 11, fig. 20 (Doマ) (さ only, misidentified).

Melanophora fuliginoides Hewitt, 1915: 101, fig. 8a (D \mathfrak{P}). Syn. n.

Zelotes fuliginea: Tucker, 1923: 359-360.

- Zelotes fuliginoides: Tucker, 1923: 379; Giltay, 1935: 16; Roewer, 1955: 463; Bonnet, 1959: 4924; Platnick, 2005.
- Zelotes montana: Tucker, 1923: 364–366, fig. 70; Kauri, 1950: 75–76, fig. 9.
- Zelotes simoni: Tucker, 1923: 374; Giltay, 1935: 18; Roewer, 1955: 466; Bonnet, 1959: 4951; Platnick, 2005.
- Zelotes fuligineus: Giltay, 1935: 16; Roewer, 1955: 463; Bonnet, 1959: 4924; Platnick, 2005.
- Zelotes montanus: Giltay, 1935: 17; Roewer, 1955: 464; Bonnet, 1959: 4935; Russell-Smith, 1981: 153; Eagle, 1985: 136; Van den Berg & Dippenaar-Schoeman, 1988: 179; Griffin & Dippenaar-Schoeman, 1991: 166; Platnick, 2005.

Remarks: Purcell (1907) described this species under three names, *Zelotes fuligineus* having page priority. The females of this species show some variability in the length of the epigynal ducts and this could be the reasoning behind the additional names. The original descriptions of *Z. simoni* and *Z. montanus* are short and Purcell (1907) states that these closely resemble *Z*. *fuligineus.* The \mathcal{P} holotype of *Z. fuliginoides* (Hewitt, 1915) has been examined, and is considered a junior synonym of *Z. fuligineus*, along with *Z. simoni* and *Z. montanus*. The male only of *Z. aculeatus* also belongs to this species (syntype examined).

Diagnosis: The male of *Zelotes fuligineus* is similar to that of *Z. tropicalis* in that the embolar projection is long, curved and crosses over a short embolus, but there is no prolateral prong (Fig. 3 cf. Fig. 15). Females differ considerably in the shape of the epigynal plate and ducts (Figs. 5–6 cf. Figs. 17–18). Colour: black throughout.

Male: Total length 6.04. Carapace 2.71 long, 2.00 wide. Femur II length 1.67. Eye sizes and interdistances: AME 0.08, ALE 0.10, PME 0.11, PLE 0.10; AME-AME 0.03, AME-ALE 0.02, PME-PME 0.05, PME-PLE 0.03, AME-PME 0.12, ALE-PLE 0.07. Palp (Figs. 3–4): Embolar base broad with long curved prong, embolus short. Leg spination: Ti III r1-11, p2-1-1, IV p2-1-1, r2-1-1; Mt II v2-2-0, III r1-2-2.

Female: Total length 6.11. Carapace 2.58 long, 1.94 wide. Femur II length 1.39. Eye sizes and interdistances: AME 0.10, ALE 0.10, PME 0.12, PLE 0.09; AME-AME 0.02, AME-ALE 0.02 PME-PME 0.03, PME-PLE 0.03, AME-PME 0.07, ALE-PLE 0.05. Epigynum (Figs. 5–6):



Figs. 3–6: Zelotes fuligineus (Purcell, 1907). 3 Palp, ventral view;
4 Palp, retrolateral view; 5 Epigynum, ventral view;
6 Epigynum, dorsal view. Scale line=0.2 mm.

MED simple, forming broad basal triangles when viewed ventrally. Leg spination: Ti III r1-1-1, IV p2-1-1, r2-1-1; Mt III r1-2-2.

Material examined: DEMOCRATIC REPUBLIC OF CONGO: Katanga, October 1956, 18, MRAC 90.476; Luiswishi: November 1973, F. Malaisse, 19, MRAC 149.043; December 1973, 19, MRAC 148.986. ETHIOPIA: Awash Falls, 2 October 1987, A. Russell-Smith, 1ð, NMBZ A13571. KENYA: Chyulu Hills, 29 July-4 August 1986, D. Sellen, 1d, NMKE; Mt. Kenya, Sirimon track, R. Bosmans, 19, MRAC 161.871; Mt. Suswa, 10 July-29 August 1985, O. Stone & A. Ibraham, 23 49, NMKE; Watamu, September 1984, J. Murphy, 13 19, JM 12335. MALAWI: Lichenya Plateau, Mt. Mulanje, 7-23 November 1981, R. Jocqué, 1º, MRAC 156.493. NAMIBIA: Bogenfeb Diamond Area, 14-25 November 1993, E. Marais, 13, SMWN 43239; Possession Island, May 1903, L. Schultze, 18 (syntype of aculeatus), SAMC 150.601. SOUTH AFRICA: Ashton, November 1919, R. Tucker, 13, SAMC B4786; Baviaanskloof: 9 August 1978, J. Breytenbach, 13, PPRI 97/725; 3 January 1979, 13, PPRI 97/744; Bergvliet: December 1895, W. F. Purcell, 19, SAMC 727; November-December 1895, 19, SAMC 13876; September 1904, 4d, SAMC 14198; Bontebok National Park, 27-30 October 1987, museum staff, 18, BMSA 2563; Caledon, July 1910, W. F. Purcell, 23, SAMC 150.070; Camps Bay: July 1898, W. Purcell, 19, SAMC 4416; February 1898, W. F. Purcell, 18, SAMC 4449; Cape Flats, W. F. Purcell, 28, SAMC 6030; Cape of Good Hope Nature Reserve, 10-14 January 1989, R. Jocqué, 13 19, MRAC 169.791; Cape Peninsula, August 1904, W. F. Purcell, 19, SAMC 13891; Cape Town: September 1897, 25 19, SAMC 3078; 1d, SAMC 4332; July 1898, E. O. Morris, 1d, SAMC 4331; December 1900, W. F. Purcell, 19, SAMC 8647; 13, SAMC 13869; Ceres, October 1897, W. F. Purcell, 78, SAMC 13881; Colchester, 28 April 1999, R. Jocqué, 38, MRAC 208.710; Constantia: 5-22 January 1992, B. Heydenrych, 29, MRAC 174.899; 2-16 February 1992, 13, MRAC 173.618; 1-15 March 1992, 53, MRAC 174.925; 15-30 March 1992, 1d 19, MRAC 174.926; 29 March-13 April 1992, 18, MRAC 174.939; 4-12 May 1992, 28 19, MRAC 177.001; 25 May-7 June 1992, 13, MRAC 174.955; 4-18 August 1992, 13, MRAC 174.977; 16 September-4 October 1992, 19, MRAC 174.994; 19 October-8 November 1992, 39, MRAC 177.022; 8-23 November 1992, 1º, MRAC 177.009; 23 November-6 December 1992, 3º, MRAC 177.016; 6-20 December 1992, 19, MRAC 177.024; Cradock, August-October 1985, museum staff, 19, BMSA 2129; Dewetsdorp, 10 September 1991, E. Visagie & A. Web, 19, BMSA 5776; 13 mi NE of Dullstroom, 30 March 1958, E. S. Ross & R. E. Leach, 19, CASC; East London, 16 April 1999, C. Haddad, 23, NMBZ A14378; Edenville, 24 April 1969, J. Viljoen, 18, PPRI 84/576; Elgin, 5 November 1949, B. Malkin, 18, CASC; Florisbad: May 1983, 18, ex BMSA 426; 23, ex BMSA 449; June 1983, 43, ex BMSA 461; July 1983, 1º, ex BMSA 482; August 1983, 1º, BMSA 497; November 1983, 19, BMSA 678; May 1984, 18, BMSA 564; 28, BMSA 1923; 18, ex BMSA 572; June 1984, 18, ex BMSA 598; November 1984, 19, BMSA 312; April 1985, 78, ex BMSA 719; September 1985, 19, ex BMSA 1075; 16-30 March 1988, 13, BMSA 4272; 13, ex BMSA 4287; 30 March-26 April 1988, 13, BMSA 4310; 13, ex BMSA 4314; 13, BMSA 4335; 1ð, BMSA 4324; 1ð, BMSA 4319; 1ð, BMSA 4337; 1ð, BMSA 4322; 33, BMSA 4316; 23, BMSA 4330; 26 April-10 May 1988, 3ở 19, ex BMSA 1880; 1ở, ex BMSA 4377; 2ở, BMSA 4360; 1ở, BMSA 4361;10-24 May 1988, 3ô 19, BMSA 4419; 1ô, ex BMSA 4387; 58, ex BMSA 4397; 24 May-8 June 1988, 18 19, BMSA 4450; 19, BMSA 4470; 2ð 59, BMSA 4475; 29, BMSA 4479; 1ð, BMSA 4454; 1ð, BMSA 4467; 1ð, ex BMSA 4447; 8-21 June 1988, 19, BMSA 4518; 19, BMSA 4520; 19, BMSA 4374; 18, BMSA 4515; 21 June-5 July 1988, 19, BMSA 4563; 13 29, BMSA 4566; 19, BMSA 4550; 5-20 July 1988, 19, BMSA 4625; 19, BMSA 4597; 13 39, BMSA 4598; 13 19, ex BMSA 4623; 19, BMSA 4622; 19, BMSA 4596; 29, ex BMSA 4630; 20 July-4 August 1988, 19, BMSA 4689; 29, BMSA 4660; 19, ex BMSA 4659; 4-17 August 1988, L. Lotz, 1& 19, BMSA 4743; 19, BMSA 4729; 29, ex BMSA 4725; 13 39, ex BMSA 4746; 17-30 August 1988, 19, ex BMSA 4799; 2d, ex BMSA 4281; 19, ex BMSA 4805; 30 August-12 September 1988, 19, BMSA 4845; 19, ex BMSA 4872; 29, ex BMSA 4865; 1d, ex BMSA 4850; 19, ex BMSA 4845; 12-23 September 1988, 19, BMSA 4911; 19, ex BMSA 4911; 23 September-6 October 1988, 19, BMSA 5028; 6-31 October 1988, 19, BMSA 5097; 19, BMSA 5133; 19, BMSA 5106; 31 October-18 November 1988, 19, ex BMSA 5211; Golden Gate: 16 September 1985, museum staff, 19, BMSA 1035; May 1985, 1º, ex BMSA 873; August 1985, 1º, BMSA 959; Grahamstown: 1914, J. Hewitt, 19 (holotype of fuliginoides), NMSA 14604 (ex Albany Museum); November 1899, J. O'Neil, 19,



Map 1: Distribution of Zelotes fagei ■, Z. kulukhunus ▲, Z. subaeneus ▲ and Z. tropicalis ● in central and west Africa.



Map 2: Distribution of *Zelotes fuligineus* \bullet , *Z. mashonus* \bigcirc and *Z. rothschildi* \blacktriangle in southern and eastern Africa.

SAMC 5796; October 1979, S. Gilbert, 13, PPRI 87/718; Great Winterhoek Mts: 17 November 1916, R. Tucker, 19, SAMC B2771; 18 November 1918, 29, SAMC B2729; Grootfontein 105, 20 October 1987, museum staff, 1d, ex BMSA 2241; 8-9 mi W of Hanover, December 1901-February 1902, S. C. Schreiner, 19, SAMC 13882; Hawequas Mts: 4 December 1978, Endrödy-Younga, 19, TMSA 15413; 2ð 39, TMSA 15425; 1ð 19, TMSA 15418; 1ð, TMSA 15413; Heidelburg, 29 October 1987, 1&, BMSA 2657; Hermanus, October 1902, 13, SAMC 12370; Hopefield, 28 January 2001, C. Haddad, 19, NMBZ A14387; Hout Bay, March 1898, W. F. Purcell, 1º (holotype of simoni), SAMC 4343; Johannesburg: 20 July 1991, J. Evans, 19, PPRI 92/438; 25 April 1987, L. D. van der Bank, 13, PPRI 88/908; Kaalplaas Farm Wesselbron, 30 April 1992, E. J. Muller, 19, PPRI 2001/55; Kalk Bay, November-December 1895, W. F. Purcell, 19, SAMC 725; Kalk Bay Mt.: March 1902, W. F. Purcell, 13, SAMC 13873; February 1896, H. Recand, 16, SAMC 729; Kinross, 31 March 1981, D. Uys, 13, PPRI 83/478; Knysna, 30 October 1949, B. Malkin, 19, CASC; 13-19 October 1988, L. Lotz, 23, BMSA 3013; Kogmanskloof, 18, SAMC 6267; Lichtenburg, 29 May 1978, D. Uys, 1ð, PPRI 86/389; Magliesberg, 11 April 1979, F. Wanless, 1ð 19, PPRI 88/220; Maitland Dunes, 29 April 1989, R. Jocqué, 1d, MRAC 208.720; Matroosberg Mts., December 1917, R. W. Tucker, 19, SAMC B3464; Middelburg: 8 May 1991, M. de Jager, 13, ex PPRI 91/1076; 18 May 1991, 13, PPRI 91/1069; 21 August 1991, 13, PPRI 91/1432; 18 October 1991, 19, PPRI 91/1428; Montagu, October 1919, R. Tucker, 1d, SAMC B4723; Mont aux Sources Royal National Park, 22 April 1976, F. Wanless, 18 69, PPRI 88/225; Mt. Zebra National Park, August-October 1985, L. Lotz, 3d, ex BMSA 1221; Muizenberg: October 1899, W. F. Purcell, 19, SAMC 6046; 21 April-5 May 1991, R. Legg, 3d 29, MRAC 173.624; 30 June-14 July 1991, 19, MRAC 173.630; 15 November-1 December 1991, 78 19, MRAC 173.640; 10-25 October 1991, 6ð 19, MRAC 173.639; 1ð 19, MRAC 173.638; 29 September-13 October 1991, 3d 19, MRAC 173.634; 1-15 December 1991, 1d, MRAC 173.644; 26 October 1987, L. Lotz, 19, BMSA 2539; Mzimhlava River mouth: January 1980, M. E. Baddeley, 29, MRAC 159.019; 18 29, MRAC 163.229; February 1980, 19, MRAC 166.616; Ngome State Forest, April 1991, M. van der Merwe, 13, PPRI 94/702; Oudtshoorn, 29 October 1949, B. Malkin, 23, CASC; Pakhuis Pass, July 1962, N. Leleup, 13, MRAC 132.005; Plettenberg Bay, 18-25 December 1981, S. & J. Peck, 13, CASC; Poortjiesfontein, 1905, Neeser, 1º, SAMC 14493; Port Elizabeth, 1899, Drege, 1º, SAMC 5381; Port Nolloth, April 1905, L. Schultze, 1d, ZMHB 28645 (misidentified as aculeatus); Pretoria, 18 July 1978, D. Uys, 18, PPRI 86/329; Roedtan: 7 November 2001, M. van Jaarsveld, 19, PPRI 2003/266; 19, PPRI 2003/513; 7 May 2002, 19, PPRI 2003/283; 11 June 2002, 29, PPRI 2003/284; 27 June 2002, 19, PPRI 2003/189; 3 July 2002, 19, PPRI 2003/514; 18 July 2002, 19, PPRI 2003/727; 16 October 2002, 19, PPRI 2003/265; 26 February 2003, 18, PPRI 2003/1320; Roodepoort, 28 September 1986, A. Leroy, 19, PPRI 89/824; Ruigtevlei, October 1984, R. J. Dowsett, 23 29, MRAC 166.127; Rustenburg, 2 June 1978, D. Uys, 13, PPRI 86/339; Rustenberg Nature Reserve, 9 February 1997, A. Leroy, 13, PPRI 97/804; Sabie, 19 June 1984, A. van der Berg, 19, PPRI 87/642; St Helena Bay, 18, SAMC 9840; St James Bay: April 1901, W. F. Purcell, 19, SAMC 9194; July 1907, C. French, 18, SAMC B2348; Sedgefield, September 1984, R. J. Dowsett, 18, MRAC 1666; Settlers Farm: 7 November 2001, M. van Jaarsveld, 19, PPRI 2003/267; 9 January 2002, 19, PPRI 2003/512; 13 March 2002, 18, PPRI 2003/76; 4 April 2002, 19, PPRI 2003/210; 7 May 2002, 19, PPRI 2003/64; 23 July 2002, 19, PPRI 2003/695; 28 August 2002, 19, PPRI 2003/511; 26 February 2003, 1d, ex PPRI 2003/1299; Signal Hill: September 1901, W. F. Purcell, 13 39 (syntypes of fuligineus), SAMC 9277; April 1896, W. F. Purcell, 19, SAMC 826; October 1901, 29, SAMC 12068; June 1900, 1ð, SAMC 8541; September 1901, 3ð 19, SAMC 9301; 3 May 1976, F. Wanless, 29, PPRI 88/221; 13 July 1978, 23, PPRI 88/226; December 1897, 19, SAMC 3059; 18, SAMC 5977; Slanghoek, November 1897, W. F. Purcell, 16 29, SAMC 3296; Southfield, October-November 1985, museum staff, 19, BMSA 1316; Steenbras, 1 October 1917, R. Tucker, 18, SAMC B3345; Stellenbosch: October 1904, R. Broom, 28, SAMC 14327; September 1904, 1d, SAMC 13864; Sundays River valley: 11 May 1990, P. Stephen, 1º 2 imm., PPRI 99/238; 28 January 1999, H. Potgieter, 15 19, PPRI 2000/228; 23 November 1999, 45 79, PPRI 2000/230; 10 km E of Suurbraak, 12-18 January 1989, R. Jocqué, 19, MRAC 169.699; Swartberg Nature Reserve, 20 May 2002, Z. van der Walt, 38 19 4juvs, PPRI 2003/604; Swartberg Pass, 4 December 1978, J. Breytenbach, 18, PPRI 97/741; Swellendam, November 1925, K. H. Bernard, 19, SAMC B6893; Table Mt.: October 1900, W. F. Purcell, 1º (holotype of montanus), SAMC 8589; April 1900, W. F. Purcell, 19, SAMC 8564; September 1899, C. L. Leopoldt, 19, SAMC 5733; 19, SAMC 13875; February 1919, R. W. Tucker, 108, SAMC B4598; 1 November 1914, 19, SAMC B523; January 1919, R. W. Tucker, 1º, SAMC B4523; Tussen-die-Riviere, 23 March 2001, C. Haddad, 13, NMBZ A14393; Uitzicht Annex: 19 October-28 December 1988, L. Lotz, 43, BMSA 3124; 4-19 December 1989, 13, BMSA 3341; Vlagkop, November 1901, S. C. Schreiner, 1º, SAMC 9576. TANZANIA: Ibaya Hill, Mkomazi Game Reserve: 15 April 1995, A. Russell-Smith, 19, AMNH; 17 April 1995, 1d 19, AMNH; Kiboshi, August 1911, J. Sjöstedt, 19, NREA; Kilimanjaro, east slope, 16 November 1956, P. Basilewsky & N. Leleup, 16 19, MRAC 112238; 19, MRAC 112.238; Mt. Meru, 2 July 1957, P. Basilewsky & N. Leleup, 13, MRAC 122.207; Mwanihana Forest Reserve, Udzungwa Mts, 28-29 September 1984, N. Scharff, 19, ZMUC.

Distribution: Namibia, South Africa, Kenya, Ethiopia, Tanzania, Democratic Republic of Congo (Map 2).

Natural history: Collected with Z. *invidus*, Z. *frenchi*, Z. *scrutatus* and Z. *sclateri*. More abundant during the cooler months of April–September.



Figs. 7–8: Zelotes kulukhunus sp. n. 7 Epigynum, ventral view; 8 Epigynum, dorsal view. Scale line=0.2 mm.

Zelotes kulukhunus sp. n. (Figs. 7-8, Map 1)

Type: Female holotype from Bebedjia, near Moundou, Chad, 10 October 1977 (G. Ruella), deposited in MRAC (151.438)

Etymology: The specific name is an adjective taken from the Ndebele word meaning large, referring to the size of the female.

Diagnosis: Zelotes kulukhunus is one of the largest Zelotes species found in the Afrotropical Region and can be distinguished by the very simple median epigynal ducts and enlarged lateral epigynal ducts (Fig. 8). Colour: dark brown throughout.

Female: Total length 10.41. Carapace 3.75 long, 3.33 wide. Femur II length 2.67. Eye sizes and interdistances: AME 0.12, ALE 0.12, PME 0.15, PLE 0.12; AME-AME 0.04, AME-ALE 0.01, PME-PME 0.07, PME-PLE 0.07, AME-PME 0.12, ALE-PLE 0.07. Epigynum (Figs. 7–8): MED very simple, LED enlarged. Leg spination: Ti III r1-11; Mt II v2-2-0.

Male: Unknown.

Other material examined: BURKINA FASO: North Yatenga Ouahigouya, July–October 1992, M. N. De Visscher & G. Balança, 19, MRAC 174.741.

Distribution: Known only from Burkina Faso and Chad (Map 1).

Zelotes mashonus sp. n. (Figs. 9-10, Map 2)

Zelotes montanus: Tucker, 1923: 366 (misidentified).

Type: Female holotype from Harare, Zimbabwe, April 1917, deposited in SAMC (B3211), misidentified as *Z. montanus* by R. W. E. Tucker (1923).

Etymology: The specific name is an adjective derived from Mashonaland, the northern province of Zimbabwe.

Diagnosis: *Zelotes mashonus* can be distinguished by the simple median ducts and paramedian epigynal ducts that are displaced on stalks (Fig. 10). Colour: dark brown to black throughout.

Female: Total length 7.83. Carapace 3.13 long, 2.42 wide. Femur II length 1.71. Eye sizes and interdistances: AME 0.10, ALE 0.10, PME 0.12, PLE 0.11; AME-AME 0.05, AME-ALE 0.01, PME-PME 0.06, PME-PLE

0.03, AME-PME 0.08, ALE-PLE 0.05. Epigynum (Figs. 9–10): MED simple, PED stalked. Leg spination: Ti III r1-1-1.

Male: Unknown.

Other material examined: BOTSWANA: Kwando River, 22 March 1976, A. Russell-Smith, 19, BMNH. DEMOCRATIC REPUBLIC OF CONGO: Kivu, Ruindi Plain, 10 July 1972, R. P. M. Lejeune, 19, MRAC 144.633. SOUTH AFRICA: Mont aux Sources Royal Natal National Park, 22 April 1977, F. Wanless, 19, ex PPRI 88/225.

Distribution: Botswana, D.R.C, South Africa and Zimbabwe (Map 2).

Zelotes rothschildi (Simon, 1909) (Figs. 11-12, Map 2)

Melanophora rothschildi Simon, 1909: 31–32 (D^Q).

Zelotes rothschildi: Berland, 1922: 49; Giltay, 1935: 17; Roewer, 1955: 465; Bonnet, 1959: 4947; Platnick, 2005.

Diagnosis: Zelotes rothschildi is very similar to Z. catholicus Chamberlin, 1924 found in Mexico, and only after further collecting in both Africa and Mexico can the status of these two species be decided. In Africa Z. rothschildi is closest to Z. subaeneus but can be distinguished by the shorter, more curved lateral epigynal margins and shorter median ducts (Figs. 11–12 cf. Figs. 13–14). Colour: carapace brown, legs light brown/ orange and abdomen grey/brown.

Female: Total length 8.38. Carapace 3.38 long, 2.46 wide. Femur II length 1.88. Eye sizes and interdistances: AME 0.12, ALE 0.15, PME 0.15, PLE 0.12; AME-AME 0.07, AME-ALE 0.01, PME-PME 0.05, PME-PLE 0.03, AME-PME 0.12, ALE-PLE 0.05. Epigynum (Figs. 11–12): LEM short and curved, MED short, PED situated anteriorly. Leg spination: Ti III r2-1-1, p 2-1-1, IV r2-1-1, p2-1-1.

Male: Unknown.

Material examined: DEMOCRATIC REPUBLIC OF CONGO: Mpala, 11 January 1953, H. Bomans, 19, MRAC 75925. ETHIOPIA: Dira Dawa, M. Rothschild, 19 (holotype), MNHN AR1946.

Distribution: Known only from Ethiopia and eastern Democratic Republic of Congo (Map 2).

Zelotes subaeneus (Simon, 1885) (Figs. 13-14, Map 1)

Prosthesima subaenea Simon, 1885: 382-383 (D9).

Zelotes subaeneus: Roewer, 1955: 466; Bonnet, 1959: 4952; Platnick, 2005.



Figs. 9–10: Zelotes mashonus sp. n. 9 Epigynum, ventral view; 10 Epigynum, dorsal view. Scale line=0.2 mm.

Diagnosis: Zelotes subaeneus is closest to *Z. rothschildi* but can be distinguished by the longer, straighter lateral epigynal margins and longer median ducts (Figs. 13–14 cf. Figs. 11–12). Colour: brown throughout.

Female: Total length 6.25. Carapace 2.92 long, 2.33 wide. Femur II length 1.83. Eye sizes and interdistances: AME 0.08, ALE 0.10, PME 0.10, PLE 0.10; AME-AME 0.05, AME-ALE 0.03, PME-PME 0.06, PME-PLE 0.05, AME-PME 0.06, ALE-PLE 0.03. Epigynum (Figs. 13–14): LEM long and straight, MED long and angular, PED situated posteriorly. Leg spination: Ti III r1-1-1, p 2-1-1, IV p2-1-1.

Male: Unknown.

Material examined: SENEGAL: Dakar, E. Blondel, 19 (holotype), MNHN AR1890.

Distribution: Known only from the type locality (Map 1).

Zelotes tropicalis sp. n. (Figs. 15–18, Map 1)

Types: Male holotype and 1^Q paratype from Tinderet Forest, Rift Valley, Kenya, 22 August 1977 (G. Coulon), deposited in MRAC (149.329).

Etymology: The specific name refers to its widespread distribution in tropical Africa.

Diagnosis: The male of *Zelotes tropicalis* is similar to that of *Z. fuligineus* in that the embolar projection is long, curved and crosses over the short embolus, but *Z. tropicalis* can be distinguished by the long prolateral



Figs. 11–14: 11–12 Zelotes rothschildi (Simon, 1909). 11 Epigynum, ventral view; 12 Epigynum, dorsal view.13–14 Zelotes subaeneus (Simon, 1885). 13 Epigynum, ventral view; 14 Epigynum, dorsal view. Scale line=0.2 mm.

prong on the embolar base, which is not as broad (Fig. 15 cf. Fig. 3). Females differ considerably from *Z. fuligineus* in the shape of the epigynal plate and ducts (Figs. 17–18 cf. Figs. 5–6). Colour: dark brown throughout.

Male: Total length 7.33. Carapace 2.75 long, 2.08 wide. Femur II length 1.50. Eye sizes and interdistances: AME 0.09, ALE 0.09, PME 0.10, PLE 0.09; AME-AME 0.02, AME-ALE 0.01, PME-PME 0.06, PME-PLE 0.04, AME-PME 0.10, ALE-PLE 0.05. Palp (Figs. 15–16): Retrolateral embolar projection long, curved and crosses over embolus, prolateral prong long. Leg spination: Ti II v0-1-0, III r1-1-1.

Female: Total length 6.00. Carapace 2.67 long, 2.08 wide. Femur II length 1.50. Eye sizes and interdistances: AME 0.10, ALE 0.10, PME 0.10, PLE 0.10; AME-AME 0.03, AME-ALE 0.01, PME-PME 0.03, PME-PLE 0.03, AME-PME 0.09, ALE-PLE 0.05. Epigynum (Figs. 17–18): AEM and LEM close together, PEM displaced posteriorly, transverse ridges present. Leg spination: Ti III r1-1-1.

Other material examined: CAMEROON: Mt. Cameroon, 12 March 1981, Bosmans & Van Stalle, 18, MRAC 162.549. DEMOCRATIC REPUBLIC OF CONGO: Lulimbi, July-August 1976, M. Lejeune, 19, MRAC 168.878. IVORY COAST: Appouesso: 29 November 1993, Jocqué, Seabé & Tanoh, 13, MRAC 202.311; 33, MRAC 202.302; 3 January 1994, 13, MRAC 202.307; 53, MRAC 202.306; 33 29, MRAC 202.310; 13, MRAC 202.314; 13 January 1994, 33 19, MRAC 202.309; 31 January 1994, 15 19, MRAC 202.298; 15 49, MRAC 202.308; 13, MRAC 202.315; 13 19, MRAC 202.315; 16 February 1994, 18 29, MRAC 202.316; 28, MRAC 202.319; 28, MRAC 202.322; 19, MRAC 202.299; 4 March 1994, 55 19, MRAC 202.320; 28, MRAC 202.300; 18, MRAC 202.318; 3 May 1994, 29, MRAC 202.321; 18 May 1994, 19, MRAC 202.312; 18 July 1994, 18, MRAC 202.317; 5 August 1994, 2d, MRAC 202.304; 14 November 1994, 1d, MRAC 202.313; 22 November 1994, 13, MRAC 201.013; 1 December 1994, 1ð, MRAC 202.301; 3ð, MRAC 202.305; 3ð, MRAC 202.323; 18 December 1994, 23, MRAC 204.721; 43, MRAC 204.717; 13 29, MRAC 204.681; 13, MRAC 204.745; 13, MRAC 204.719; 13, MRAC 204.696; 2 January 1995, 38 19, MRAC 204.693; 28, MRAC 204.683; 3ð 19, MRAC 204.722; 1ð, MRAC 204.726; 19, MRAC 204.692; 15 January 1995, 38, MRAC 204.734; 18, MRAC 204.711; 18, MRAC 204.703; 2ð, MRAC 204.727; 1ð, MRAC 204.712; 31 January 1995, 29, MRAC 202.303; 26 February 1995, 1d, MRAC 204.710; 1d, MRAC 204.724; 12 March 1995, 13, MRAC 204.704; 26 March 1995, 19, MRAC 204.690; 23 April 1995, 19, MRAC 204.749; 19, MRAC 204.739; 7 May 1995, 1º, MRAC 204.685; 20 May 1995, 1ð, MRAC 204.735; 13, MRAC 204.701; 13, MRAC 204.691; 13, MRAC 204.674; 13, MRAC 204.702; 4 June 1995, 13, MRAC 204.737; 13, MRAC 204.708; 1d, MRAC 204.729; 1d, MRAC 204.744; 18 June 1995, 23 19, MRAC 204.668; 13, MRAC 204.697; 13 19, MRAC 204.746; 98, MRAC 204.713; 28, MRAC 204.728; 18, MRAC 204.706; 13, MRAC 204.669; 13 19, MRAC 204.747; 2 July 1995, 13, MRAC 204.705; 13, MRAC 204.716; 13 19, MRAC 204.725; 33, MRAC 204.750; 13, MRAC 204.714; 13 July 1995, 13, MRAC 204.684; 16 July 1995, 13, MRAC 204.730; 13, MRAC 204.733; 19, MRAC 204.671; 30 July 1995, 13, MRAC 204.738; 19, MRAC 204.699; 13, MRAC 204.731; 29, MRAC 204.748; 27 August 1995, 19, MRAC 204.732; 22 October 1995, 19, MRAC 204.720; 3 December 1995, 13, MRAC 204.709; 17 December 1995, 13, MRAC 204.686; 1ð, MRAC 204.695; 1ð, MRAC 204.694; 18 December 1995, 2ð, MRAC 204.723; Bouaké: January-March 1981, J. Everts, 13 19, MRAC 166.431; 2ð 59, MRAC 174.030; January 1981, 6ð 29, MRAC 166.397; 3ð, MRAC 166.355; 3ð 19, MRAC 166.274; February 1981, 5ð, MRAC 166.337; 1ð 19, MRAC 166.389; 1ð 19, MRAC 166.255; 16 February 1981, 73 29, MRAC 159.519; March 1981, 19, MRAC 166.250; 19, MRAC 166.386; Bouitha, 28 December 1983, 188 69, MRAC 165.985; Kossou: 17 April 1974, R. Jocqué & E. Tybaert, 13, MRAC 151.768; 20 May 1974, 18, MRAC 151.818; 17 June 1974, 19, MRAC 151.800; 1-16 July 1974, 29, MRAC 151.884; 5 August 1974,



Figs. 15–18: Zelotes tropicalis sp. n. 15 Palp, ventral view; 16 Palp, retrolateral view; 17 Epigynum, ventral view; 18 Epigynum, dorsal view. Scale line=0.2 mm.

2ð, MRAC 149.727; 23 December 1974, 2ð, and 4 January 1975, 19, MRAC 151.870; 20 January-4 February 1975, 16d, MRAC 151.673; 3-17 March 1975, 33, MRAC 151.667; 2-13 April 1975, 13 39, MRAC 151.676; 28 April 1975, 19, MRAC 151.595; 4 August 1975, 28, MRAC 152.493; 4-31 August 1975, 48, MRAC 151.670; Mabi Forest, Bettié, 23 November 1993, R. Jocqué, 19, MRAC 177.633; Marahoué Ranch, Mankono: December 1979, J. Everts, 13, MRAC 172.324; January 1980, 1d, MRAC 172.310; 1d, MRAC 172.323; 4d 29, MRAC 172.320; 1d 19, MRAC 172.325; February 1980, 1d, MRAC 172.318; 13, MRAC 172.319; March 1980, 19, MRAC 172.322; Pakodji, 23 January 1984, R. Schouten & J. Buysen, 75 59, MRAC 165.984; Titekro, 11 January 1984, 55 19, MRAC 165.986. KENYA: Kwaisagat, September 1984, J. Murphy, 13, JM 12203. MALAWI: Lichenya Plateau, Mt. Mulanje, 5-23 November 1981, R. Jocqué, 13, MRAC 155.677; November 1981, 13, MRAC 155.757. NIGERIA: Ibadan: 6 April 1973, A. Russell-Smith, 13 19, AMNH; 3ð 59, BMNH; July 1973, 1ð, AMNH; Lagos, 30 December 1948, B. Malkin, 18, CALC; Obudu Plateau, 3 December 1974, A. Russell-Smith, 19, BMNH; Warri, 1 February 1949, B. Malkin, 19, CALC. RWANDA: Lake Mohasi, April 1968, E. Vertriest, 18, MRAC 134.804; June-July 1971, P. Nyalugaka, 13, MRAC 140.732; Lake Ihema, 26 November 1985, R. Jocqué, 19, MRAC 165.600. UGANDA: Rakai, July 1994, D. Penney, 18, MRAC 210.062.

Distribution: Tropical Africa (Map 1).

Natural history: Collected with *Zelotes scrutatus*. Peak adult activity recorded during December–February.

The laetus group

Diagnosis: The *laetus* group was identified and described by Platnick & Shadab (1983) as the *puritanus* subgroup and was also used by Levy (1998). It contains those species in which the males have an elongated palpal bulb, retrolaterally facing median apophysis and distally originating embolus which curves ventrally. Females have an epigynum with a single anterior margin and ducts that are longitudinally arranged, with lateral ducts enlarged but irregular in shape.

Zelotes angolensis sp. n. (Figs. 19-20, Map 3)

Type: Female holotype from Capolo, Angola, 1 June 1958 (E. S. Ross & R. E. Leach), deposited in CALC.

Etymology: The specific name refers to the country in which the type was collected.

Diagnosis: Zelotes angolensis is similar to Z. *ovambensis* but can be distinguished by the shorter AEM and LEM (Fig. 19 cf. Fig. 29). Colour: light brown throughout.

Female: Total length 5.08. Carapace 2.33 long, 1.67 wide. Femur II length 1.33. Eye sizes and interdistances: AME 0.08, ALE 0.09, PME 0.09, PLE 0.09; AME-AME 0.04, AME-ALE 0.03, PME-PME 0.06, PME-PLE 0.03, AME-PME 0.07, ALE-PLE 0.04. Epigynum (Figs. 19–20): AEM and LEM short. Leg spination: Mt I v0-0-0.

Male: Unknown.

Material examined: Only the holotype.

Distribution: Known only from the type locality (Map 3).



Figs. 19–20: Zelotes angolensis sp. n. 19 Epigynum, ventral view; 20 Epigynum, dorsal view. Scale line=0.2 mm.

Zelotes laetus (O. P.-Cambridge, 1872) (Figs. 21–24, Map 3)

- Melanophora laeta O. P.-Cambridge, 1872: 241-242, pl. 15, fig. 19 (D♂♀).
- *Melanophora inaurata* O. P.-Cambridge, 1872: 246–247, pl. 16, fig. 26 (D♂).
- *Prosthesima tristicula* O. P.-Cambridge, 1874: 377–378, pl. 51, fig. 6a–b (Dð); 1876: 552; Simon, 1878: 99.
- Prosthesima laeta: O. P.-Cambridge, 1876: 552; Simon, 1878: 98.
- Prosthesima inaurata: O. P.-Cambridge, 1876: 553; Simon, 1878: 99; 1882: 234; 1890: 90.
- Prosthesima antiope Simon, 1878: 64 (Dd).
- Zelotes antiope: Simon, 1914: 174, fig. 364 (D^Q); Roewer, 1955: 445; Bonnet, 1959: 4912; Jézéquel, 1961: 602, fig. 17.
- Zelotes inauratus: Reimoser, 1919: 168; Roewer, 1955: 451; Denis, 1955: 107–110, figs. 5–7; Bonnet, 1959: 4927; Marinaro, 1967: 695, fig. 15.
- Zelotes laetus: Reimoser, 1919: 168; Roewer, 1955: 451; Bonnet, 1959: 4929; Levy, 1998: 122–125, figs. 58–61; Platnick, 2005.
- Zelotes tristiculus: Reimoser, 1919: 171; Roewer, 1955: 460; Bonnet, 1959: 4957.
- Zelotes reformans Chamberlin, 1924: 625, fig. 65 (D^Q); Roewer, 1955: 469; Bonnet, 1959: 4947; Ubick & Roth, 1973: 8; Platnick & Shadab, 1983: 182–184, figs. 253–258.
- Zelotes salensis Berland, 1936: 70–71, fig. 3 (D^Q); Roewer, 1955: 465; Bonnet, 1959: 4949; Platnick, 2005. Syn. n.
- Zelotes elolensis Caporiacco, 1941: 92–93, fig. 33 (Dð); Roewer, 1955: 463; Platnick, 2005. Syn. n.

Zelotes simplex: Denis 1947: 59 (misidentification).

Remarks: I have examined all the type material and there is no doubt that all the specimens represent the same species, thus *Z. saleusis* Berland, 1936 and *Z. elolensis* Caporiacco, 1941 are considered junior synonyms of *Z. laetus*.

Diagnosis: Zelotes laetus is very similar to Z. pallidipes. Males can be distinguished by the elongated palp and smaller median apophysis (Figs. 21–22 cf. Figs. 31–32). Females differ in the enlargement of the LED, and MED are barely visible ventrally (Figs. 23–24 cf. Figs. 33–34). Colour: black throughout.

Male: Total length 5.52. Carapace 2.42 long, 2.05 wide. Femur II length 1.33. Eye sizes and interdistances: AME 0.07, ALE 0.10, PME 0.10, PLE 0.10; AME-AME 0.03, AME-ALE 0.01, PME-PME 0.07, PME-PLE 0.03, AME-PME 0.08, ALE-PLE 0.04. Palp (Figs. 21–22): EMB coiled and filamentous, partially ensheathed. Leg spination: Fe IV r0-0-1; Ti IV p1-0-1; Mt I v0-0-0, II v0-0-0.

Female: Total length 6.53. Carapace 2.56 long, 2.00 wide. Femur II length 1.31. Eye sizes and interdistances: AME 0.10, ALE 0.12, PME 0.10, PLE 0.10; AME-AME 0.08, AME-ALE 0.02 PME-PME 0.08, PME-PLE 0.04, AME-PME 0.12, ALE-PLE 0.06. Epigynum (Figs. 23–24): LEM close together, LED greatly enlarged, MED barely visible ventrally. Leg spination: Fe IV r0–0, Ti IV p 1–0–1; Mt I v0–0–0.

Material examined: BURKINA FASO: Ouagadougou, April–May 1965, B. Roman, 1å, ex MRAC 128.044. CAPE VERDE ISLANDS: Boa Vista, 1958, L. Pequeno, 1å, MRAC 131.142; Brava, 1959, L. Pequeno, 1¢, MRAC 131.156; S. Nicolau, 1958, L. Pequeno, 1¢, MRAC 131.308; Sal, 1¢ (holotype of *salensis*), MNHN AR1824; 15 November 1998, W. Tavernier, 1¢, MRAC 208.414. CHAD: Massif du Tibesti: July–October 1965, Y. Brandily, 1¢, MRAC 133.947, 7¢, MRAC 133.010; 2¢, MRAC 132.940. EGYPT: Alexandria, 1864, O. P.-Cambridge, 1å 1¢ (syntypes of *inauratus*), OXUM B267; April 1864, 1å (holotype of *tristiculus*), OXUM B267; Egypt, 1å, OXUM



Figs. 21–24: Zelotes laetus (O. P.-Cambridge, 1872). 21 Palp, ventral view; 22 Palp, retrolateral view; 23 Epigynum, ventral view; 24 Epigynum, dorsal view. Scale line=0.2 mm.

B2671; Bardiyah, March 1927, 19, MZUF. ETHIOPIA: Awash National Park, 24 April 1986, A. Russell-Smith, 13 29, NMBZ A13573; 2 October 1987, 19, NMBZ A13570; Elolo, 30 July 1939, E. Zavattari, 13 (holotype of elolensis), MZUF. IVORY COAST: N. Korhogo Bandama River, 28 January 1980, J. Everts, 13, MRAC 174.048. KENYA: Baringo, August 1974, J. Murphy, 19, JM 3801; 13, JM 3829; Chyulu Hills, 29 July-4 August 1986, D. Sellen, 23, NMKE; Galana River, April 1982, M. Clifdon, 13, NMKE; Isido, 26 November 1957, Ross & Leach, 1º, CASC. LIBYA: Kufra Oasis, 22-28 February 1933, 13, MZUF. NIGER: Niamey, November 1977, A. Russell-Smith, 29, BMNH. PALESTINE: 16 (holotype of laetus), OXUM B262.2.61; 1º (syntype of inauratus), OXUM B262. SENEGAL: Cape Vert, 1 December 1983, E. Tybaert, 19, MRAC 161.830; 1ð, MRAC 161.831; 5-10 km S of Richard Toll, September 1989, J. Everts, 13 49, MRAC 172.105; 253 99, MRAC 172.032; October 1989, 53 39, MRAC 172.030; 24 September 1991, H. Van der Valk, 19, MRAC 200.522; 1 October 1991, 19, MRAC 200.530; 3 October 1991, 13, MRAC 201.146; 12 October 1991, 13, MRAC 201.165; 28 October 1991, 29, MRAC 200.546; 31 October 1991, 19, MRAC 200.576. SAUDI ARABIA: Juriad Island, 10 September 1981, J. M. Bafort, 1º, MRAC 168.723. SUDAN: Wadi Halfa, September 1962, J. Cloudsley-Thompson, 19, MRAC 122.740.

Distribution: North Africa, Palestine, Saudi Arabia and Israel (Map 3).

Natural history: Collected throughout the year, but appears to be more abundant in September and October.

Zelotes namibensis sp. n. (Figs. 25-28, Map 3)

Types: Male holotype from Ondundozonananduna Mts, Namibia, 10 October–30 November 1986 (E. Griffin), deposited in SMWN (39708). Paratypes: Same locality, 16 May–22 June 1986, 13 39, SMWN 39501; 10 October–30 November 1986, 63 49, SMWN 39708; 8 August–14 September 1987, 33 19, SMWN 40706; 26 March–6 May 1988, 73 19, SMWN 41148.

Etymology: The specific name refers to the country in which the types were collected.

Diagnosis: Zelotes namibensis is easily distinguished by the short embolus and enlarged median apophysis process of the male, and by the arrangement of the female median and lateral epigynal ducts. Colour: carapace and legs brown, abdomen grey.

Male: Total length 4.16. Carapace 2.08 long, 1.67 wide. Femur II length 1.25. Eye sizes and interdistances: AME 0.07, ALE 0.07, PME 0.07, PLE 0.07; AME-AME 0.04, AME-ALE 0.01, PME-PME 0.05, PME-PLE 0.02, AME-PME 0.10, ALE-PLE 0.03. Palp (Figs. 25–26): EMB short, median apophysis process long. Leg spination: Mt I & II v0-0-0.

Female: Total length 5.41. Carapace 2.50 long, 1.83 wide. Femur II length 1.67. Eye sizes and interdistances: AME 0.06, ALE 0.10, PME 0.10, PLE 0.12; AME-AME 0.07, AME-ALE 0.01, PME-PME 0.07, PME-PLE 0.01, AME-PME 0.11, ALE-PLE 0.04. Epigynum (Figs. 27–28): MED short, uncoiled, LED short. Leg spination: Mt I & II v0-0-0.

Other material examined: NAMIBIA: Bloubokdraai: 20 May–18 June 1986, E. Griffin, 53, SMWN 39356; 13 October–15 November 1986, 53 39, SMWN 39589; Duikersdrink: 8 October–14 November 1986, E. Griffin, 23 19, SMWN 39806; 10 February–20 March 1987, 13 19, SMWN 39952; Helio: 13 October–11 November 1986, E. Griffin, 23, SMWN 39532; 14 February–23 March 1987, 13, SMWN 40147; 8 August–14 September 1987, 13, SMWN 40723; 27 March–4 May 1988, 19, SMWN 40978; 83, SMWN 40979; Kamaseb: 18 May–16 June 1986, E. Griffin, 53 19, SMWN 39459; 13 February–20 March 1987, 13 19, SMWN 40093; 8 August–14 September 1987, 23, SMWN 40695; Mahanene Agriculture Research Station, 5 September–5 October 1993, B. Wohlleber, 13, SMWN 43273; Okokatuwo, 7–11 May 1991, E. Griffin, 13, SMWN 42601; Ombika Etosha National Park, 10–14 January 1997, A. Russell-Smith, 23, SMWN; 8–12 November 1996, 13 19, SMWN.

Distribution: This species is apparently endemic to northern Namibia (Map 3).

Natural history: Collected throughout the year.

Zelotes ovambensis Lawrence, 1927 (Figs. 29–30, Map 3) Zelotes ovambensis Lawrence, 1927: 17, fig. 4 (D^Q); Giltay, 1935: 17;

Roewer, 1955: 465; Bonnet, 1959: 4938; Griffin & Dippenaar-Schoeman, 1991: 166; Platnick, 2005.

Diagnosis: Zelotes ovambensis is similar to Z. angolensis but can be distinguished by the long straight AEM, straight PEM and longer LEM (Fig. 29 cf. Fig. 19). Colour: legs and carapace brown, abdomen grey.

Female: Total length 5.17. Carapace 2.08 long, 1.67 wide. Femur II length 1.25. Eye sizes and interdistances: AME 0.06, ALE 0.08, PME 0.07, PLE 0.06; AME-AME 0.05, AME-ALE 0.01, PME-PME 0.05, PME-PLE 0.03, AME-PME 0.08, ALE-PLE 0.05. Epigynum (Figs. 29–30): LEM long, AEM and PEM straight, ducts short. Leg spination: Mt I & II v0-0-0.

Male: Unknown.

Material examined: NAMIBIA: Ongandjera, March 1923, R. F. Lawrence, 19 (holotype), SAMC B6634.

Figs. 25–30: 25–28 Zelotes namibensis sp. n. 25 Palp, ventral view; 26 Palp, retrolateral view; 27 Epigynum, ventral view; 28 Epigynum, dorsal view. 29–30 Zelotes ovambensis Lawrence, 1927. 29 Epigynum, ventral view; 30 Epigynum, dorsal view. Scale line=0.2 mm.

Distribution: Known only from the type locality (Map 3).

Zelotes pallidipes Tucker, 1923 (Figs. 31-34, Map 3)

Zelotes pallidipes Tucker, 1923: 368–369, fig. 74 (Dð); Giltay, 1935: 17; Roewer, 1955: 465; Bonnet, 1959: 4938; Griffin & Dippenaar-Schoeman, 1991: 166; Platnick, 2005.

Remarks: Tucker (1923) described and illustrated a male from Nomptsas, yet he stated that the specimen was a female, thus Roewer (1955) stated in error that a female had been described.

Diagnosis: Zelotes pallidipes is similar to *Z. laetus* but males can be distinguished by the shorter embolus and longer median apophysis. The median ducts are clearly visible ventrally in the female epigynum, and the lateral ducts are smaller (Figs. 33–34 cf. Figs. 23–24). Colour: carapace and legs brown, abdomen grey.

Male: Total length 4.00. Carapace 1.92 long, 1.25 wide. Femur II length 1.25. Eye sizes and interdistances: AME 0.06, ALE 0.09, PME 0.07, PLE 0.07; AME-AME 0.08, AME-ALE 0.01, PME-PME 0.05, PME-PLE 0.03, AME-PME 0.09, ALE-PLE 0.05. Palp (Figs. 31–32):



Figs. 31–34: Zelotes pallidipes (Tucker, 1923). 31 Palp, ventral view;
32 Palp, retrolateral view; 33 Epigynum, ventral view;
34 Epigynum, dorsal view. Scale line=0.2 mm.

EMB short, MA long. Leg spination: Ti III r1-1-1; Mt I & II v0-0-0, IV r1-1-2.

Female: Total length 4.83. Carapace 1.92 long, 1.50 wide. Femur II length 1.25. Eye sizes and interdistances: AME 0.07, ALE 0.07, PME 0.07, PLE 0.10; AME-AME 0.10, AME-ALE 0.01, PME-PME 0.07, PME-PLE 0.02, AME-PME 0.08, ALE-PLE 0.04. Epigynum (Figs. 33–34): MED clearly visible ventrally, lateral ducts small, plate with no transverse ridges. Leg spination: Ti III r1-1-1; Mt I & II v0-0-0.

Material examined: NAMIBIA: Brandberg, 24 April 1999, R. Jocqué, 1º, MRAC 208.726; Dome Gorge: 8 May-5 June 1984, E. Griffin, 23, SMWN 38080; 5 June-3 July 1984, J. Irish & H. Ross, 23, SMWN 38146; 28 August-25 September 1984, 13, SMWN 38321; 14 January-11 February 1985, 13, SMWN 38609; 11 March-9 April 1985, 19, SMWN 38762; Lower Ostrich Gorge: 9 April-8 May 1984, E. Griffin, 23, SMWN 37098; 8 May-5 June 1984,19, SMWN 38069; 3-30 July 1984, 13, SMWN 38183; 3-28 August 1984, 19, SMWN 38261; Nomptsas, 23 December 1915, R. W. Tucker, 13 (holotype), SAMC B 2134; Panner Gorge, 11 March-9 April 1985, J. Irish & H. Ross, 19, SMWN 38728; Rossing Mine: 13 March-9 April 1984, E. Griffin, 23, SMWN 37016; 13, SMWN 37022; 3-28 August 1984, J. Irish & H. Ross, 13, SMWN 38268; 14 January-11 February 1985, 13, SMWN 38602; 11 March-9 April 1985, 33, SMWN 38760; 5 April-6 May 1985, 19, SMWN 38828; Skeleton Coast Park, 24 January-4 February 1982, J. Irish, 13, SMWN 41567.

Distribution: Apparently endemic to western Namibia (Map 3).

Zelotes scrutatus (O. P.-Cambridge, 1872) (Figs. 35–38, Map 4)

Drassus scrutatus O. P.-Cambridge, 1872: 239, pl. 15, fig. 16a (D♂♀). *Melanophora picina* O. P.-Cambridge, 1872: 242, pl. 16, fig. 20 (D♀). *Melanophora scutata* O. P.-Cambridge, 1872: 244–245, pl. 16, fig. 24 (D♂).

- Prosthesima curina O. P.-Cambridge, 1874: 379–380 (Dd); 1876: 552; Simon, 1878: 99.
- Prosthesima picina: O. P.-Cambridge, 1876: 552; Simon, 1878: 98.
- Drassus scutatus: Simon, 1878: 156.
- Prosthesima scutata: Simon, 1878: 98; Strand, 1915: 142.
- Prosthesima impexa Simon, 1885: 383-384 (DQ). Syn. n.
- Scotophaeus scutatus: Simon, 1893: 371.
- Melanophora o'neili Purcell, 1907: 332, pl. 15, fig. 62 (D^Q). Syn. n.
- *Setaphis bechuanica* Purcell, 1908: 240, pl. 11, fig. 26 (D^Q); Tucker, 1923: 322 (^Q only; δ misidentified=*Z. otavi*); Roewer, 1955: 440; Bonnet, 1958: 4036; Eagle, 1985: 136; Griffin & Dippenaar-Schoeman, 1991: 166; Platnick, 2005. **Syn. n.**
- Setaphis anchoralis Purcell, 1908: 240–241, pl. 11, fig. 27 (D^Q); Tucker, 1923: 320–321; Roewer, 1955: 440; Lawrence, 1965: 11; Griffin & Dippenaar-Schoeman, 1991: 166; Platnick, 2005. **Syn. n.**
- Setaphis bicolor Simon, 1908: 424 (D♂♀); Roewer, 1955: 440; Bonnet, 1958: 4036.
- Scotophaeus scrutatus: Reimoser, 1919: 165; Roewer, 1955: 435; Bonnet, 1958: 3973.
- Zelotes curinus: Reimoser, 1919: 167; Roewer, 1955: 448; Bonnet, 1959: 4919.
- Zelotes picinus: Reimoser, 1919: 169; Roewer, 1955: 455; Bonnet, 1959: 4942.
- Zelotes scutatus: Reimoser, 1919: 170; Roewer, 1955: 458; Bonnet, 1959: 4949.
- Zelotes o'neili: Tucker, 1923: 367–368; Roewer, 1955: 465; Griffin & Dippenaar-Schoeman, 1991: 166.
- Zelotes demonaica Lawrence, 1927: 16–17, pl. 1, fig. 9 (D?); Griffin & Dippenaar-Schoeman, 1991: 166. Syn. n.
- Drassodes cofiniotes Roewer, 1928: 105, pl. 1, fig. 10 (D^Q); Roewer, 1955: 385; Bonnet, 1956: 1563.
- Zelotes demonica: Giltay, 1935: 16.
- Zelotes o'neilli: Giltay, 1935: 17.



Figs. 35–38: Zelotes scrutatus (O. P.-Cambridge, 1872). **35** Palp, ventral view; **36** Palp, retrolateral view; **37** Epigynum, ventral view; **38** Epigynum, dorsal view. Scale line=0.2 mm.

- Zelotes simplex Denis, 1937: 1036, pl. 1, fig. 3 (Dd?); 1947: 59–60; Roewer, 1955: 459; Bonnet, 1959: 4952.
- Zelotes sidama Caporiacco, 1941: 93–94, fig. 34 (Dð); Roewer, 1955: 466; Platnick, 2005. Syn. n.
- Zelotes demonaicus: Roewer, 1955: 463; Bonnet, 1959: 4920; Platnick, 2005.
- Zelotes impexus: Roewer, 1955: 464; Bonnet, 1959: 4927; Platnick, 2005.
- Setaphis ancoralis: Bonnet, 1958: 4036.
- Zelotes oneilli: Russell-Smith, 1981: 153; Eagle, 1985: 136.
- Zelotes scrutatus: Levy, 1998: 125–128, figs. 35–36, 37a, 62–68; Platnick, 2005.
- Zelotes impexa: Russell-Smith, 1999: 220.
- Zelotes oneili: Bonnet, 1959: 4938; Platnick, 2005.

Remarks: I have examined all the type material and there is no doubt that all the specimens represent the same species, thus *Z. impexus* (Simon, 1885), *Z. oneili* (Purcell, 1907), *Z. demonaicus* Lawrence, 1927, *Z. sidama* Caporiacco, 1941, *S. bechuanica* Purcell, 1908 and *S. anchoralis* Purcell, 1908 are considered junior synonyms of *Z. scrutatus*. This is a very widespread species in Africa which is undoubtedly why there are so many descriptions. Diagnosis: Zelotes scrutatus is similar to Z. namibensis and Z. soulouensis but males can be distinguished from Z. namibensis by the elongated palpal bulb and shorter median apophysis (Figs. 35–36 cf. Figs. 25–26). Females can be distinguished from those of Z. namibensis by the coiled median ducts (Fig. 38 cf. Fig. 28) and from Z soulouensis by the shorter MED and by the LEM being closer together (Figs. 37–38 cf. Figs. 41–42). Colour: variable from black throughout to yellowish brown, some specimens with two white longitudinal stripes dorsally on abdomen.

Male: Total length 5.55. Carapace 2.44 long, 1.67 wide. Femur II length 1.17. Eye sizes and interdistances: AME 0.10, ALE 0.12, PME 0.12, PLE 0.12; AME-AME 0.10, AME-ALE 0.02, PME-PME 0.12, PME-PLE 0.04, AME-PME 0.07, ALE-PLE 0.05. Palp (Figs. 35–36): EMB short and thick, median apophysis short. Leg spination: Mt I v0-0-0, II v0-0-0, III p2-2-2.

Female: Total length 6.25. Carapace 2.64 long, 1.94 wide. Femur II length 1.44. Eye sizes and interdistances: AME 0.10, ALE 0.12, PME 0.12, PLE 0.10; AME-AME 0.06, AME-ALE 0.02, PME-PME 0.06, PME-PLE 0.04, AME-PME 0.10, ALE-PLE 0.06. Epigynum (Figs. 37–38): MED coiled, LEM close together, LED short. Leg spination: Mt I v0-0-0, II v0-0-0, III p2-2-2.

Material examined: ALGERIA: Zouagha Forest, Babors Mts, 18 19 (syntypes of simplex), MNHN. BOTSWANA: Bonke, January 1905, L. Schultze, 19, SAMC 150.604; Between Khakhea and Kang, P. Schultze, 1º (holotype of Setaphis bechuanicus), ZMHB 28684; Lake Ngami, 14 July 1983, R. Harris, 18, PPRI 83/261; Manxunyane, 23 August 1976, A. Russell-Smith, 23 29, AMNH; Maxwee, November 1975, F. Wanless, 13, PPRI 88/227; Shorobe, 24 August 1975, A. Russell-Smith, 19, AMNH; Thamalakane River, Maun, 25 June 1976, A. Russell-Smith, 19, BMNH. BURKINA FASO: Kouba: 26 September 1993, De Visscher & Balança, 13, MRAC 209.845; 19, MRAC 209.852; 28 September 1993, 18, MRAC 209.864; 19, MRAC 209.850; 13, MRAC 209.868; 3 October 1993, 13, MRAC 209.854; 11-13 October 1993, 18 19, MRAC 209.856; 18 19, MRAC 207.626; 2ð, MRAC 207.631; 13-15 October 1993, 1ð, MRAC 209.862; 25-27 October 1993, 28, MRAC 207.624; 27-29 October 1993, 23 19, MRAC 209.859; 19, MRAC 207.633; 30 October 1993, 18, MRAC 209.848; 19, MRAC 207.619; Ouagadougou, April-May 1965, R. Roman, 1º, MRAC 128.044; Ouahigouya: July-October 1992, De Visscher & Balança, 29, MRAC 174.733; 128 29, MRAC 174.734; Sissamba: 19 October 1993, De Visscher & Balança, 19, MRAC 207.783; 3 November 1993, 13, MRAC 207.777; 11 November 1993, 19, MRAC 207.785; 19, MRAC 207.778; 18, MRAC 209.857; Soulou: 8-10 July 1993, De Visscher & Balança, 23, MRAC 209.838; 1ð 19, MRAC 209.839; 1ð 19, MRAC 209.847; 10-12 July 1993, 29, MRAC 209.849; 14-16 July 1993, 18, MRAC 209.835; 16-18 July 1993, 19, MRAC 209.869; 23-25 July 1993, 19, MRAC 209.861; 13, MRAC 209.834; 9-10 August 1993, 13 19, MRAC 209.833; 13, MRAC 207.710; 13, MRAC 207.723. BURUNDI: Ruzizi Plain, April 1968, S. Ndani, 1º, MRAC 133.806. CAMEROON: Hossere Vokre, 19-24 April 1983, Bosmans & van Stalle, 13, MRAC 162.270. EGYPT: Alexandria, April 1864, O. P.-Cambridge, 13 (holotype of curinus), OXUM B267. ETHIOPIA: El Dire, 21 May 1939, Prof. E. Zavattari, 18 (holotype of sidama), MZUF. ISRAEL: Palestine, 28 (syntypes of scutatus), OXUM B265 t66; 29, OXUM B337 t52. IVORY COAST: N of Korhogo Bandama River: March 1980, J. Everts, 13, MRAC 172.343; 13, MRAC 172.347; 13, MRAC 172.340; 13, MRAC 172.328; 7 April 1980, 13 19, MRAC 174.049; April 1980, 1ð, MRAC 172.346; 1ð, MRAC 172.344; Kossou, 2 March 1975, R. Jocqué, 16, MRAC 152.513; Marahoué Ranch, Mankono, March 1980, J. Everts, 18, MRAC 172.315. KENYA: Kilifi: August 1980, J. Murphy, 13 19, JM 9208; 11 August 1974, 23, JM; August-September 1980, 19, JM 9200; 24 November 1977, 19, JM 6597; Kongelai: August

1972, J. Murphy, 19, JM 1964; 17 August 1972, 23, JM 1965; Lake Harrington, 2 August 1974, J. Murphy, 19, JM; 33 mi N of Magadi, 24 November 1957, Ross & Leach, 19, CASC; Mt. Suswa, 10 July-29 August 1980, G. Stones & A. Ibrahim, 33 219, NMKE; 19, NMKE; Mtembur, 30 August-4 September 1984, J. Murphy, 19, JM 12169; Nairobi: 3 May 1987, A. & M. Ritchie, 13 19, NMKE; 27 June 1987, 19, NMKE; 14 November 1982, A. Russell-Smith, 19, NMBZ A13572; Naivasha, July 1972, J. Murphy, 13, JM 1373; Namanga, 2 September 1972, J. van Mol, 13, MRAC 143.048; Sebit: 24 August 1972, J. Murphy, 19, JM 2194; 19, JM 2195. MALI: Goundam, March 1979, W. H. Settle, 1º, CASC; 10 km E of Sevare, 15 July-1 September 1977, W. H. Settle, 1º, CASC. MOROCCO: nr Oulmès, 5 May 1977, P. Hillyard, 19, BMNH. NAMIBIA: Eisib River, 18 November-15 December 1988, E. Marias & M. Paxton, 13, SMWN 42050; Kaokoland, 16-19 October 1988, E. Griffin, 19, SMWN 40854; Lüderitz, March 1904, 19 (holotype of Setaphis anchoralis), Dr Schultze, ZMHB 28683; Mafi, March 1923, 53 29, SAMC B5886; Naukluft Nature Reserve, 24 October 1974, S. Endröndy-Younga, 13, TMSA 18712; Ongandjera, March 1923, R. F. Lawrence, 1º (holotype of demonaica), SAMC B6197; Otjituo, January 1920, R. W. Tucker, 19, SAMC B5003; Richthofen 126, February 1975, 13 19, SMWN 36171; Sidwa, 18-23 October 1987, R. Jocqué, 13, MRAC 168.540; Swakopmund, 12 April 1988, G. Schaum, 13, PPRI 88/409. NIGERIA: Ibadan: 8 February 1973, A. Russell-Smith, 13 29, AMNH; 6 April 1973, 13, BMNH; 8 July 1973, W. K. Witting, 63 69, BMNH; Ife, 1991, H. Segers, 19, MRAC 174.613; Kabba, 19-23 February 1949, B. Malkin, 19, CASC; Oguja Lake, 10-24 February 1992, H. Segers, 43, MRAC 174.619. RWANDA: Akagera National Park, 16 November-2 December 1985, R. Jocqué, 19, MRAC 165.476. SENEGAL: Dakar, 19 (holotype of impexus), MNHN AR1891; 5-10 km S of Richard Toll: J. Everts, August 1989, 243 99, MRAC 172.031; September 1989, 153 99, MRAC 172.036; 9 April 1991, 13, MRAC 201.185; 18 April 1991, 19, MRAC 201.153; 27 August 1991, 13, MRAC 200.553; 13, MRAC 200.574; 1 October 1991, 2d, MRAC 200.532; 3 October 1991, 19, MRAC 201.146; 12 October 1991, 13, MRAC 201.165; 14 October 1991, 13 19, MRAC 200.534; 17 October 1991, 29, MRAC 201.130; 18, MRAC 200.564; 21 October 1991, 19, MRAC 201.159; 24 October 1991, 19, MRAC 200.561; 28 October 1991, 25 29, MRAC 200.547; 31 October 1991, H. van der Valk, 19, MRAC 200.576; 29, MRAC 200.578; 19, MRAC 200.579; 7 November 1991, 19, MRAC 200.540. SIERRA LEONE: Makeni, 23 January 1993, F. Rensonnet, 13, MRAC 174.675. SOMALIA: Sar Uanle: 6 June 1973, 13, MZUF; 31 May 1971, 13, MZUF; 7 November 1971, 13, MZUF. SOUTH AFRICA: Bloemfontein, 5 September 1987, L. Lotz, 19, BMSA 2161; Brits: 30 October 1986, D. Uys, 19, PPRI 86/592; 1984-1985, R. Watmougi, 108 29, PPRI 87/20; Calvinia, 22 October 1990, L. Lotz, 19, BMSA 5489; Croc Valley, Nelspruit, 25 May 1999, P. Stephens, 1d, PPRI 99/127; Dawns Pride Farm, October 1980, H. D. Shaw-Copeland, 19, MRAC 166.476; Deelhoek, 21 March 2001, C. Haddad, 19, NMBZ A14378; Dunbrody, 1899, J. O'Neil, 29 (syntypes of oneili), SAMC 5277; Edenville, 5 April 1967, A. S. Dippenaar, 19, PPRI 84/557; Florisbad: October 1982, museum staff, 18, BMSA 299; November 1982, 6ð 29, BMSA 354; 4ð, BMSA 356; January 1983, 19, BMSA 403; 55 19, BMSA 2735; February 1983, 19, BMSA 417; May 1983, 1d, ex BMSA 429; September 1985, 3d, BMSA 1079; 21 October 1985, 6d, ex BMSA 1139; 9-23 November 1987, L. Lotz, 19, BMSA 3502; 1ð 19, BMSA 3492; 1ð, BMSA 3457; 1ð, ex BMSA 3497; 2ð, BMSA 3464; 18, BMSA 5299; 19, BMSA 5320; 23 November-8 December 1987, 4ð 29, ex BMSA 3585; 1d, ex BMSA 3565; 8d, BMSA 3586; 3d, BMSA 3594; 39, BMSA 3578; 19, BMSA 3618; 18 19, ex BMSA 3625; 1ð, BMSA 3629; 1ð, BMSA 3543; 3ð, BMSA 3631; 8-21 December 1987, 2ở 19, BMSA 3689; 2ở 29, ex BMSA 3738; 2ở, BMSA 3699; 1ở, BMSA 3700; 1å, BMSA 3747; 1å, BMSA 3669; 21 December 1987-5 January 1988, 19, BMSA 3876; 13, ex BMSA 3814; 19, ex BMSA 3826; 3ð 39, BMSA 3870; 5-19 January 1988, 1ð, BMSA 3975; 19, ex BMSA 3931; 19, BMSA 3979; 19 January-1 February 1988, 13, ex BMSA 4047; 28, ex BMSA 4069; 2-16 March 1988, 19, BMSA 4231; 16-30 March 1988, 13, BMSA 4272; 13 19, BMSA 4288; 13, ex BMSA 4287; 20 July-4 August 1988, 13 19, BMSA 4689; 17-30 August 1988, 18, BMSA 4776; 38, ex BMSA 4805; 30 August-12 September 1988, 19, BMSA 4850; 18, ex BMSA 4872;



Map 3: Distribution of Zelotes angolensis \land , Z. laetus \bullet , Z. namibensis \checkmark , Z. ovambensis \blacksquare , Z. pallidipes \bigstar , Z. somaliensis \varDelta and Z. soulouensis \bigcirc in Africa.

12-23 September 1988, 23, BMSA 4945; 13, ex BMSA 4946; 23 September-6 October 1988, 13, ex BMSA 5024; 13 19, BMSA 4997; 28, ex BMSA 5028; 18, ex BMSA 5000; 18, ex BMSA 5025; 18, BMSA 5021; 6-31 October 1988, 58, ex BMSA 5138; 18 19, ex BMSA 5142; 28, BMSA 5097; 28, BMSA 5063; 18, ex BMSA 5118; 31 October-18 November 1988, 13, BMSA 5242; 33 29, BMSA 5206; 1ð, BMSA 5236; 1ð 1º, ex BMSA 5211; 1ð, ex BMSA 5249; 1ð, ex BMSA 5221; 13, ex BMSA 5172; 33, BMSA 5214; 10mi N of Grahamstown, 20 November 1965, J. G. Rozen, 19, CASC; Green Valley Nuts, 1 March 2002, C. Haddad, 1ot 19, NMBZ A14417; Groblersdal: 10 January 1980, M. S. Greef, 13 29, PPRI 89/1012; 6 February 1980, 13, PPRI 83/535; 23, PPRI 81/418; Hopefield: 24 October 1987, L. Lotz, 13, BMSA 2387; 11 May 2001, C. Haddad, 19, NMBZ A14384; Johannesburg, 12 October 1987, R. Jocqué, 13, MRAC 168.552; Kroondal: 1 December 1990, V. & D. Roth, 19, CASC; 3 May 1979, D. Uys, 3d 19, PPRI 86/553; Krugersdrift Dam, 28 July 1985, museum staff, 1& 19, BMSA 2026; 2 December 1985, 1&, BMSA 1276; Marlevale Bird Sanctuary, 8 December 1990, V. & D. Roth, 19, CASC; Mt. Zebra National Park, August-October 1985, museum staff, 18, BMSA 1221; Naval Hill: October 1990, L. Lotz, 29, ex BMSA 7285; 3d, BMSA 7307; November 1990, 29, BMSA 7331; January 1991, 23 29, BMSA 7432; 23 19, BMSA 7445; February 1991, 19, BMSA 7519; April 1991, 19, BMSA 7582; 18, BMSA 7577; 18, ex BMSA 7563; May 1991, 19, BMSA 6782; August 1991, 18, BMSA 7624; September 1991, 13, BMSA 7795; 43, BMSA 7793; 23, BMSA 6647; 23, BMSA 7808; October 1991, 13, BMSA 7858; November 1991, 13 29, BMSA 7907; 13, BMSA 7878; 13, BMSA 7886; 29, BMSA 7329; 23, BMSA 7359; 29, BMSA 7365; 23, BMSA 7342; December 1991, 13, BMSA 7954; 13, BMSA 7959; Ndumo Game Reserve, 3 December 2001, C. Haddad, 19, NMBZ A14389; Nigel, 13 December 1978, D. Uys, 19, PPRI 86/439; Oudtshoorn, 29 October 1949, B. Malkin, 13, CASC; Pietermaritzburg, 14 April 1976, F. Wanless, 13, PPRI 88/217; Pretoria: 22 December 1977, D. Uys, 13, PPRI 86/308; 4 January 1978, 13, PPRI 86/301; 25 February 1977, 13, PPRI 77/1135; 18 February 1979, 19, PPRI 86/208; Reitondale Research Station: 2 February 1998, A. van den Berg, 43 29, PPRI 2001/210; 4ð 29 6juv., PPRI 2003/138; 23 February 1998, 19, PPRI 2000/499; 24 March 1998, 85 19 1juv., PPRI 2003/139; 11 May 1998, 18, PPRI 2003/140; 14 September 1998, 18, PPRI 2003/142; 1 October 1998, 13, PPRI 2002/980; 5 October 1998, 13 19, PPRI 2003/143; 48 29, PPRI 2003/157; 26 October 1998, 58 59, PPRI 2003/141; Roodeplaat Research Station, 1 March 1995, E. von Maltitz, 18, PPRI 2001/138; Roodepoort, 28 September 1986, A. Leroy, 19, PPRI 89/822; Rust de Winter, 31 March 1981, M. Stiller, 13, PPRI 85/224; Rustenburg, 21 March 1980, 13 19, PPRI 86/434; 5 January 1981, 13, PPRI 84/49; Settlers Farm: 11 January 2001, M. van Jaarsveld, 25 19, PPRI 2003/305; 19, 2003/691; 30 January 2001, 33 19, PPRI 2003/104; 19, PPRI 2003/689; 30 May 2001, 13, PPRI 2003/221; 8 August 2001, 1d, PPRI 2003/62; 13 September 2001, 19, PPRI 2003/690; 11 October 2001, 19, PPRI 2003/687; 19, PPRI 2003/688; 13, PPRI 2003/96; 5 February 2002, 18, PPRI 2003/222; 6 February 2002, 19, PPRI 2003/521; 13 March 2002, 18, PPRI 2003/289; 28, PPRI 2003/304; 7 May 2002, 1d, PPRI 2003/192; 1d, PPRI 2003/500; 1d, PPRI 2003/878; 13, PPRI 2003/1310; 11 June 2002, 23, PPRI 2003/683; 25 August 2002, 13, PPRI 2003/1215; 13, PPRI 2003/1214; 12 September 2002, 18, PPRI 2003/12; 18, PPRI 2003/111; 17 September 2002, 13, PPRI 2003/353; 19, PPRI 2003/522; 13, PPRI 2003/879; 17 October 2002, 13, PPRI 2003/726; 23, PPRI 2003/893; 13, PPRI 2003/1202; 13, PPRI 2003/1213; 26 February 2003, 43, PPRI 2003/1299; Springs, 14 November 1987, M. Filmer, 19, PPRI 88/131; Suikerbosrand Nature Reserve, 14 February 1979, A. S. Dippenaar & A. Leroy, 13, PPRI 79/161; Vaalwater, 16 December 1989, M. Filmer, 1º, PPRI 90/97; Virginia, October-November 1987, L. Lotz, 18, BMSA 2753; Wonderboom, February 1910, J. Hewitt, 18, TMSA 13546. SUDAN: En Nahud, December 1970, J. L. Cloudsley-Thompson, 13, MRAC 137.579. TANZANIA: Ibaya Camp, Mkomazi, November 1994, A. Russell-Smith, 43 39, NMBZ A13574. ZIMBABWE: Msuna, 13 July 1985, D. Thompson, 19, NMBZ A3712; Mutare Heights, 15 March 1958, E. Ross & R. Leach, 19, CASC; Mzola Camp, 5-9 December 1997, Girls College & museum staff, 5ð 59, NMBZ A13494; 28 19, NMBZ A13493; Rifa Conservation Camp, 4-8 December 1995, Girls College & museum staff, 19, NMBZ A13302; 28, NMBZ A13306.



Map 4: Distribution of Zelotes scrutatus in Africa.

Distribution: Throughout Africa (Map 4).

Natural history: Seasonal adult activity recorded in the southern hemisphere between the months of September–January, and in the northern hemisphere from July–October.

Zelotes somaliensis sp. n. (Figs. 39-40, Map 3)

Type: Female holotype from Sar Uanle, Somalia, 15 November 1971, deposited in MZUF.

Etymology: The specific name refers to the type locality.

Diagnosis: Zelotes somaliensis is similar to Z. angolensis but can be distinguished by the very short epigynal plate, where the lateral margins are close to the anterior margins, and the posterior margins are obscure (Fig. 39 cf. Fig. 19). Colour: orange throughout.

Female: Total length 3.75. Carapace 1.67 long, 1.25 wide. Femur II missing. Eye sizes and interdistances: AME 0.09, ALE 0.09, PME 0.09, PLE 0.09; AME-AME 0.02, AME-ALE 0.01, PME-PME 0.03, PME-PLE 0.02, AME-PME 0.06, ALE-PLE 0.02. Epigynum (Figs. 39–40): MED coiled, PEM obscure, epigynum compact. Leg spination: Fe III p0-0-1, IV r0-0-1, p0-0-1; Pa III p0-1-0.

Male: Unknown.

Material examined: Only the holotype.

Distribution: Known only from the type locality (Map 3).

Zelotes soulouensis sp. n. (Figs. 41-42, Map 3)

Type: Female holotype from Soulou, Burkina Faso, 16–18 July 1993 (De Visscher & Balança), deposited in MRAC (209.842).

Etymology: The specific name refers to the type locality.



Figs. 39–42: 39–40 Zelotes somaliensis sp. n. 39 Epigynum, ventral view; 40 Epigynum, dorsal view. 41–42 Zelotes soulouensis sp. n. 41 Epigynum, ventral view; 42 Epigynum, dorsal view. Scale line=0.2 mm.

Diagnosis: Zelotes soulouensis is similar to *Z. scrutatus* but can be distinguished by the LED being further apart and the longer more coiled MED (Figs. 41–42 cf. Figs. 37–38). Colour: legs and carapace light brown, abdomen grey.

Female: Total length 5.83. Carapace 2.08 long, 1.42 wide. Femur II length 1.08. Eye sizes and interdistances: AME 0.09, ALE 0.09, PME 0.09, PLE 0.07; AME-AME 0.03, AME-ALE 0.01, PME-PME 0.06, PME-PLE 0.03, AME-PME 0.08, ALE-PLE 0.04. Epigynum (Figs. 41–42): MED long and coiled, LED short. Leg spination: Fe III p0-0-1, IV r0-0-1, p0-0-1; Mt I & II v0-0-0, III p1-1-2, IV r1-1-1.

Male: Unknown.

Material examined: Only the holotype.

Distribution: Known only from the type locality (Map 3).

The caldarius group

Diagnosis: The *caldarius* group contains those species in which the male has an elongated palpal bulb with the embolus projecting proximally and ventrally as in the *laetus* group, but the median apophysis has a normal process. The terminal apophysis is broad and partially ensheathes the embolus. Females differ from the *laetus* group in that they have paired anterior epigynal margins and the posterior margin is undifferentiated. The shape of the ducts is similar to that of the *humilis group* in that the lateral ducts are enlarged and bulbous.

Zelotes caldarius (Purcell, 1907) (Figs. 43-46, Map 5)

Melanophora caldaria Purcell, 1907: 330, pl. 15, figs. 56–57 (D♂♀). *Zelotes caldaria*: Tucker, 1923: 355–356.

Zeloles culturili. Tucket, 1925. 555–556.

Zelotes caldarius: Giltay, 1935: 16; Roewer, 1955: 466; Bonnet, 1959: 4915; Platnick, 2005.

Diagnosis: The male embolus of *Zelotes caldarius* is similar to those of *Z. laetus* and *Z. pallidipes* in its trajectory, but the median apophysis is normal, without a retrolateral process, and the terminal apophysis is broadened to ensheathe the embolus (Figs. 43–44 cf. Figs. 21–22 and 31–32). The lateral margins of the female epigynum are rounded, and close to the anterior margins, the epigynum is distinctive and unlike that of any other *Zelotes* species (Fig. 45).

Male: Damaged and in many pieces. Palp (Figs. 43–44): EMB long and filamentous, MA normal, TA broadened.

Female: Total length 4.58. Carapace 2.08 long, 1.50 wide. Femur II length 1.67. Eye sizes and interdistances: AME 0.06, ALE 0.08 PME 0.06, PLE 0.06; AME-AME 0.02, AME-ALE 0.01, PME-PME 0.02, PME-PLE 0.02, AME-PME 0.06, ALE-PLE 0.04. Epigynum



Figs. 43–46: Zelotes caldarius (Purcell, 1907). 43 Palp, ventral view;
44 Palp, retrolateral view; 45 Epigynum, ventral view;
46 Epigynum, dorsal view. Scale line=0.2 mm.



Map 5: Distribution of *Zelotes caldarius* \blacksquare and *Z. resolution* \bullet in South Africa.

(Figs. 45–46): LEM rounded, close to AEM. Leg spination: Pa III r0-0-0.

Material examined: SOUTH AFRICA: Ceres, 3 December 1917, R. Tucker, 1º, SAMC B3507; November 1917, 1º, SAMC B3458; Montagu Baths, November 1902, Mr & Mrs W. Purcell, 1ð 2º (syntypes), SAMC 12666; October 1919, R. Tucker, 1º, SAMC B4722.

Distribution: Cape Province, South Africa (Map 5).

Zelotes cordiger (L. Koch, 1875) (Figs.47-48)

Prosthesima cordigera L. Koch, 1875: 45, pl. 5, fig. 2 (D^Q). Zelotes cordigerus: Roewer, 1955: 463. Zelotes cordiger: Bonnet, 1959: 4919; Platnick, 2005.

Diagnosis: In the absence of males the placement of *Zelotes cordiger* is unclear, but the female seems to be closest to *Z. caldarius*, and can be distinguished by the highly coiled median ducts of the epigynum and the straight lateral epigynal margins (Figs. 47–48 cf. Figs. 45–46). Colour: specimen faded.

Female: Total length 6.00. Carapace 2.66 long, 1.66 wide. Femur II length 1.33. Eye sizes and interdistances: AME 0.10, ALE 0.10, PME 0.12, PLE 0.10; AME-AME 0.05, AME-ALE 0.01, PME-PME 0.05, PME-PLE 0.05, AME-PME 0.08, ALE-PLE 0.04. Epigynum (Figs. 47–48): LEM straight, MED highly coiled. Leg spination: Fe IV r0-0-1, p0-0-1; Pa IV r0-1-0; Mt II v2-2-0.



Figs. 47–48: Zelotes cordiger (L. Koch, 1875). **47** Epigynum, ventral view; **48** Epigynum, dorsal view. Scale line=0.2 mm.

Male: Unknown.

Material examined: ETHIOPIA: C. Jirkeli, 19 (holotype), BMNH 1915.3.5.5816.

Distribution: Known only from the type locality.

Zelotes resolution sp. n. (Figs. 49-52, Map 5)

Types: Male holotype and 2° paratypes from Resolution, Albany, South Africa (A. Walton), deposited in TMSA (6349).

Etymology: The specific name is a noun in apposition taken from the type locality.

Diagnosis: The trajectory of the male embolus of *Zelotes resolution* is similar to that of *Z. caldarius* but the bulb differs in the shape of the terminal apophysis, which is a broad sheet ensheathing the embolus, and the median apophysis bears a groove to partially ensheathe the embolus (Figs. 49-50 cf. Figs. 43-44). The lateral



Figs. 49–52 Zelotes resolution sp. n. 49 Palp, ventral view; 50 Palp, retrolateral view; 51 Epigynum, ventral view; 52 Epigynum, dorsal view. Scale line=0.2 mm.



Figs. 53–54: Zelotes caprivi sp. n. 53 Palp, ventral view; 54 Palp, retrolateral view. Scale line=0.2 mm.

epigynal margins are longitudinal and close together (Fig. 51). Colour: black throughout.

Male: Total length 5.42. Carapace 2.50 long, 1.83 wide. Femur II length 1.50. Eye sizes and interdistances: AME 0.10, ALE 0.10, PME 0.08, PLE 0.09; AME-AME 0.06, AME-ALE 0.01, PME-PME 0.08, PME-PLE 0.03, AME-PME 0.08, ALE-PLE 0.05. Palp (Figs. 49–50): EMB long, ensheathed by MA and TA. Leg spination: Fe IV r0-0-1, p0-0-1; Mt II v0-0-0.

Female: Total length 4.83. Carapace 2.33 long, 1.67 wide. Femur II length 1.25. Eye sizes and interdistances: AME 0.06, ALE 0.08, PME 0.06, PLE 0.06; AME-AME 0.04, AME-ALE 0.01, PME-PME 0.04, PME-PLE 0.04, AME-PME 0.08, ALE-PLE 0.04. Epigynum (Figs. 51–52): LEM longitudinal, MED widened anteriorly. Leg spination: Fe IV r0-0-1, p0-0-1; Mt I & II v0-0-0.

Other material examined: SOUTH AFRICA: Baviaanskloof, J. Breytenbach, 1*3*, 9 August 1978, PPRI 97/746.

Distribution: Known only from Western Cape Province, South Africa (Map 5).

The humilis group

Diagnosis: The *humilis* group contains those species in which the male has a short, distally originating, embolus that curves ventrally as in the *laetus* group, but they differ in the shape and orientation of the median apophysis, which is somewhat enlarged in the *humilis* group, and its process is ventrally orientated. Females have a single anterior epigynal margin like the *laetus* group, but differ in the arrangement of the ducts. The *humilis* group has short median ducts and large bulbous lateral ducts.

Zelotes caprivi sp. n. (Figs. 53-54, Map 6)

Type: Male holotype from 19 km E of Omega, W. Caprivi, Namibia, 30 October–5 November 1987 (E. Marais), deposited in SMWN (41492).

Etymology: The specific name is a noun in apposition taken from the type locality.

Diagnosis: Zelotes caprivi is similar to Z. humilis but can be distinguished by the pointed tip of the terminal apophysis, and the convoluted embolar base (Figs. 53–54 cf. Figs. 59–60). Colour: dark brown throughout.

Male: Total length unknown (abdomen damaged). Carapace 1.67 long, 1.17 wide. Femur II length 1.00. Eye sizes and interdistances: AME 0.07, ALE 0.07, PME 0.07, PLE 0.07; AME-AME 0.03, AME-ALE 0.01, PME-PME 0.03, PME-PLE 0.02, AME-PME 0.05, ALE-PLE 0.02. Palp (Figs. 53–54): Tibial apophysis long and thin, TA pointed, EB convoluted. Leg spination: Pa III p0-1-0, IV r0-1-0, p0-1-0; Ti III p1-1-2, IV r2-1-1, p1-2-2.

Female: Unknown.

Material examined: Only the holotype.

Distribution: Known only from the Caprivi strip, Namibia (Map 6).

Zelotes capsula Tucker, 1923 (Figs. 55-58, Map 6)

Zelotes capsula Tucker, 1923: 356–357, pl. 9. fig. 67a–b (D♂♀); Giltay, 1935: 16; Roewer, 1955: 463; Bonnet, 1959: 4916; Platnick, 2005.



Figs. 55–58: Zelotes capsula Tucker, 1923. 55 Palp, ventral view;
56 Palp, retrolateral view; 57 Epigynum, ventral view;
58 Epigynum, dorsal view. Scale line=0.2 mm.

Diagnosis: Males of *Zelotes capsula* can easily be distinguished by the large, extended terminal apophysis and enlarged medially situated median apophysis (Fig. 55), and females by the shape of the epigynal plate and ducts (Figs. 57–58). Colour: black throughout.

Male: Total length 5.00. Carapace 2.50 long, 1.92 wide. Femur II length 1.25. Eye sizes and interdistances: AME 0.06, ALE 0.07, PME 0.07, PLE 0.07; AME-AME 0.05, AME-ALE 0.01, PME-PME 0.05, PME-PLE 0.03, AME-PME 0.07, ALE-PLE 0.05. Palp (Figs. 55–56): TA large, extended, MA enlarged, medially situated, EMB short and thickened. Leg spination: Mt I & II v0-0-0.

Female: Total length 5.69. Carapace 2.36 long, 1.72 wide. Femur II length 1.25. Eye sizes and interdistances: AME 0.10, ALE 0.10, PME 0.08, PLE 0.08; AME-AME 0.04, AME-ALE 0.01, PME-PME 0.05, PME-PLE 0.02, AME-PME 0.07, ALE-PLE 0.05. Palp (Figs. 57–58): LEM widened posteriorly, MED short and thin, LED enlarged and bulbous. Leg spination: Mt I & II v0-0-0. *Material examined*: SOUTH AFRICA: Muizenberg, 15 November–1 December 1991, R. Legg, 13, MRAC 174.638; Great Winterhoek Mts., 27 November 1916, R. Tucker, 13 19 (syntypes), SAMC B2872; 29 November 1916, 29, SAMC B2675; 29, SAMC B2684; 24 November 1916, 19, SAMC B2822; 23, SAMC B2797.

Distribution: Known only from coastal South Africa (Map 6).

Zelotes humilis (Purcell, 1907) (Figs. 59-62, Map 6)

Melanophora humilis Purcell, 1907: 331–332, pl. 15, figs. 60–61 (D♂♀). *Zelotes hewitti* Tucker, 1923: 360–361, pl. 9, fig. 69a (D♀); Giltay,

1935: 16; Roewer, 1955: 464; Bonnet, 1959: 4926; Platnick, 2005. **Syn. n.**

- Zelotes humilis: Tucker, 1923: 361–362; Giltay, 1935: 17; Roewer, 1955: 464; Bonnet, 1959: 4927; Platnick, 2005.
- Zelotes montivaga Tucker, 1923: 366, pl. 11, fig. 71 (D^Q). Svn. n.

Zelotes montivagus: Giltay, 1935: 17; Roewer, 1955: 464; Bonnet, 1959: 4936; Platnick, 2005.

Remarks: The male syntype of *Z. humilis* cannot be traced and is presumed lost. I have examined many specimens, including the remaining types, and *Z. humilis*, *Z. hewitti* and *Z. montivaga* are undoubtedly all the same species, thus *Z. hewitti* Tucker, 1923 and *Z. montivaga* Tucker, 1923 are considered junior synonyms of *Z. humilis*.



Figs. 59–62: Zelotes humilis (Purcell, 1907). **59** Palp, ventral view; **60** Palp, retrolateral view; **61** Epigynum, ventral view; **62** Epigynum, dorsal view. Scale line=0.2 mm.



Map 6: Distribution of Zelotes caprivi △, Z. capsula △, Z. humilis ●, Z. muizenbergensis ¬, Z. namaquus ○, Z. otavi △, Z. pedimaculosus △ and Z. tetramamillatus ¬ in Africa.

Diagnosis: Males of *Zelotes humilis* can be distinguished from those of *Z. otavi* and *Z. muizenbergensis* by the long embolus (Figs. 59–60 cf. Figs. 67–68 and 63–64) and from *Z. caprivi* by the raised, but not pointed, terminal apophysis (cf. Figs. 53–54). Females have coiled median ducts and bulbous lateral ducts (Fig. 62). Colour: light brown throughout. One of the smallest *Zelotes* species.

Male: Total length 3.16. Carapace 1.50 long, 1.08 wide. Femur II length 0.67. Eye sizes and interdistances: AME 0.07, ALE 0.05, PME 0.05, PLE 0.05; AME-AME 0.04, AME-ALE 0.00, PME-PME 0.05, PME-PLE 0.01, AME-PME 0.05, ALE-PLE 0.01. Palp (Figs. 59–60): EMB visible beyond raised TA. Leg spination: Fe IV r0-1-0; Mt I v2-2-0.

Female: Total length 3.75. Carapace 1.50 long, 1.00 wide. Femur II length 0.83. Eye sizes and interdistances: AME 0.05, ALE 0.05, PME 0.05, PLE 0.05; AME-AME 0.04, AME-ALE 0.00, PME-PME 0.04, PME-PLE 0.02, AME-PME 0.05, ALE-PLE 0.02. Epigynum (Figs. 61–62): LEM close together, MED coiled, LED bulbous. Leg spination: Fe IV r-0-1-0; Mt I 2-2-0.

Material examined: SOUTH AFRICA: Ceres: October 1897, W. F. Purcell, 1º (syntype of *humilis*), SAMC 3231; November 1917, R. Tucker, 1º (holotype of *montivaga*), SAMC B3503; Florisbad: November 1984, L. Lotz, 1º, BMSA 652; July 1985, 1ð, BMSA 944; August 1985, 15ð, BMSA 1001; September 1985, 6ð 6º, BMSA 1082; 21 October 1985, 2º, ex BMSA 1139; 9–23 November 1987, 1ð, BMSA 3461; 1º, BMSA 3416; 2º, BMSA 3497; 23 November–8 December 1987, 1ð, BMSA 3625; 1º, BMSA 3585; 8–21 December 1987, 2ð, BMSA 3678; 1º, BMSA 3711; 1º, BMSA 3646; 21 December 1987– 5 January 1988, 1ð, BMSA 3795; 2ð, BMSA 3814; 1º, BMSA 3840;



Figs. 63–64: Zelotes muizenbergensis sp. n. 63 Palp, ventral view; 64 Palp, retrolateral view. Scale line=0.1 mm.

13, BMSA 3826; 5-19 January 1988, 49, BMSA 3974; 19, BMSA 3931; 1ð, BMSA 3979; 19 January-1 February 1988, 19, BMSA 4047; 19, BMSA 4040; 29, BMSA 4034; 18, BMSA 4069; 1-15 February 1988, 1d, BMSA 4165; 5-20 July 1988, 1d, BMSA 4630; 20 July-4 August 1988, 13, BMSA 4688; 13, ex BMSA 4689; 13, BMSA 4659; 4-17 August 1988, 13, BMSA 4706; 13, BMSA 4746; 13, BMSA 4725; 3ð, BMSA 4699; 2ð, BMSA 4742; 3ð, BMSA 4730; 17-30 August 1988, 1ð 19, BMSA 4779; 1ð, BMSA 4805; 1ð, BMSA 4752; 1ð, BMSA 4775; 30 August-12 September 1988, 13, BMSA 4845; 13, BMSA 4865; 13, BMSA 4866; 13, BMSA 4827; 13, BMSA 4815; 13 19, ex BMSA 4872; 12-23 September 1988, 18, ex BMSA 4945; 19, BMSA 4912; 23 19, BMSA 4946; 13, BMSA 4885; 23 September-6 October 1988, 53 19, BMSA 5025; 23, BMSA 5024; 13, BMSA 5000; 5d, BMSA 5007; 6-31 October 1988, 19, BMSA 5138; 19, BMSA 5042; 19, BMSA 5097; 18 19, BMSA 5118; 19, BMSA 5142; 31 October-8 November 1988, 13, BMSA 5211; Grahamstown, November 1915, J. Hewitt, 1º (holotype of hewitti), SAMC B5698; Grant's Hill, August 1991, L. Lotz, 18, BMSA 7626; Mt. Zebra National Park, July-October 1985, L. Lotz, 18, ex BMSA 1221; Naval Hill: August 1990, L. Lotz, 33, BMSA 6530; 13, BMSA 7617; 23, BMSA 7629; November 1990, 19, BMSA 7359; Ngome State Forest, June 1992, M. van der Merwe, 18, PPRI 94/695; Rietondale Research Station, 23 February 1998, 13, PPRI 2000/499; Tuinplaas: M. van Jaarsveld, 13 September 2001, 13, PPRI 2003/340; 11 October 2001, 19, PPRI 2003/6; 13, PPRI 2003/10; 13, PPRI 2003/220; 13 19, PPRI 2003/694: 7 November 2001, 19, PPRI 2003/370: 7 January 2002, 19, PPRI 2003/11; 9 January 2002, 1d, PPRI 2003/9; 1d, PPRI 2003/52; 19, 2003/341; 22 July 2002, 18, PPRI 2003/8; 20 August 2002, 13, PPRI 2003/806; 21 August 2002, 13, PPRI 2003/887; 23, PPRI 2003/352; 13, PPRI 2003/1200; 17 September 2002, 13, PPRI 2003/97; 19, PPRI 2003/341, 28, PPRI 2003/650; 28, PPRI 2003/888; 18, PPRI 2003/892. ZIMBABWE: Marondera, 25 May 1998, J. Mugodo, 13, NMBZ.

Distribution: Known only from South Africa and Zimbabwe (Map 6).

Natural history: Adult activity recorded mainly during August–October.

Zelotes muizenbergensis sp. n. (Figs. 63-64, Map 6)

Type: Male holotype from Muizenberg, Cape Peninsula, South Africa, 15 November–1 December 1991 (R. Legg), deposited in MRAC (174.638).

Etymology: The specific name refers to the type locality.

Diagnosis: Zelotes muizenbergensis is closest to Z. *otavi* but lacks the retrolateral prong on the embolar base (Figs. 63–64 cf. Figs. 67–68). Colour: dark brown throughout.

Male: Total length 5.25. Carapace 2.50 long, 1.83 wide. Femur II length 1.25. Eye sizes and interdistances: AME 0.07, ALE 0.07, PME 0.07, PLE 0.07; AME-AME 0.03, AME-ALE 0.01, PME-PME 0.05, PME-PLE 0.02, AME-PME 0.06, ALE-PLE 0.03. Palp (Figs. 63–64): EMB short, TA raised, no retrolateral prong on EB. Leg spination: Fe I p0-0-0, II p0-0-1, IV r0-0-1, p0-0-1; Mt I v0-0-0, II v2-0-0.

Female: Unknown.

Material examined: Only the holotype.

Distribution: Known only from the type locality (Map 6).

Zelotes namaquus sp. n. (Figs. 65-66, Map 6)

Types: Male holotype and 1σ paratype from Bitterfontein, Namaqualand, South Africa, 16 November 1949 (B. Malkin), deposited in CASC.

Etymology: The specific name is an adjective derived from the type locality.

Diagnosis: *Zelotes namaquus* can be distinguished by the long prolateral prong on the embolar base and long embolus (Figs. 65–66). Colour: light brown throughout.

Male: Total length 3.83. Carapace 1.92 long, 1.33 wide. Femur II length 1.08. Eye sizes and interdistances: AME 0.05, ALE 0.06, PME 0.06, PLE 0.06; AME-AME 0.03, AME-ALE 0.01, PME-PME 0.06, PME-PLE 0.02, AME-PME 0.07, ALE-PLE 0.03. Palp (Figs. 65–66): EB with long prolateral prong, EMB long. Leg spination: Fe IV r0-0-1, p0-0-1; Mt I v0-0-0, II v0-0-0.

Female: Unknown.

Material examined: Only the types.



Figs. 65–66: Zelotes namaquus sp. n. **65** Palp, ventral view; **66** Palp, retrolateral view. Scale line=0.1 mm.

Distribution: Known only from the type locality (Map 6).

Zelotes otavi nom. nov. (Figs. 67-70, Map 6)

Setaphis lightfooti Tucker, 1923: 326–327, pl. 10, fig. 49 (Dď); Roewer, 1955: 441; Bonnet, 1958: 4036; Griffin & Dippenaar-Schoeman, 1991: 166; Platnick, 2005.

Remarks: Setaphis lightfooti is transferred to *Zelotes*, where the name is preoccupied by *Z. lightfooti* (Purcell, 1907). Here given the replacement name *Z. otavi*.

Type: Male holotype from Otavi, Namibia, December 1918 (R. M. Lightfoot), deposited in SAMC (B4642).

Etymology: The specific name is a noun in apposition derived from the type locality.

Diagnosis: Zelotes otavi, with its raised TA, is similar to *Z. muizenbergensis* but can be distinguished by the retrolateral prong on the embolar base (Figs. 67–68 cf. Figs. 63–64). The lateral and posterior margins of the female epigynum are straight (Fig. 69). Colour: carapace light brown/orange, abdomen grey with two longitudinal white stripes, femora–tibiae dark brown, metatarsi and tarsi orange.

Male: Total length 5.50. Carapace 2.33 long, 1.67 wide. Femur II length 1.50. Eye sizes and interdistances: AME 0.08, ALE 0.08, PME 0.08, PLE 0.08; AME-AME 0.05, AME-ALE 0.01, PME-PME 0.08, PME-PLE 0.03, AME-PME 0.08, ALE-PLE 0.05. Palp (Figs. 67–68): EMB short, EB with retrolateral prong. Leg spination: Fe IV r0-0-1, p0-0-1; Pa IV r0-1-0; Ti I v0-2-0, II v0-2-0; Mt I & II v2-2-0.

Female: Total length 5.50. Carapace 2.38 long, 1.67 wide. Femur II length 1.25. Eye sizes and interdistances: AME 0.08, ALE 0.09, PME 0.08, PLE 0.08; AME-AME 0.04, AME-ALE 0.01, PME-PME 0.10, PME-

PLE 0.03, AME-PME 0.06, ALE-PLE 0.02. Epigynum (Figs. 69–70): MED very short, LEM and PEM straight. Leg spination: Fe IV r0-0-1, p0-0-1; Pa III p0-1-0, IV r0-1-0.

Other material examined: BOTSWANA: Maxwee, September-November 1973, A. Russell-Smith, 17å 11º, BMNH. NAMIBIA: Dorstland: 8 October–14 November 1986, E. Griffin, 2å 1º, SMWN 39731; 10 February–20 March 1987, 3º, SMWN 39989; Otjituo, January 1920, R.W. Tucker, 1å, SAMC B5003.

Distribution: Northern Namibia and Botswana (Map 6).

Zelotes pedimaculosus Tucker, 1923 (Figs. 71–72, Map 6)

Zelotes pedimaculosa Tucker, 1923: 369–370, pl. 11, fig. 75 (D?); Giltay, 1935: 17; Griffin & Dippenaar-Schoeman, 1991: 166.

Zelotes pedimaculosus: Roewer, 1955: 465; Bonnet, 1959: 4940; Platnick, 2005.

Diagnosis: Zelotes pedimaculosus can be distinguished by the curved lateral margins of the epigynum and the central orifice (Fig. 71). Colour: legs and carapace brown, abdomen grey.

Female: Total length 4.75. Carapace 1.92 long, 1.25 wide. Femur II length 1.08. Eye sizes and interdistances: AME 0.05, ALE 0.07, PME 0.07, PLE 0.07; AME-AME 0.06, AME-ALE 0.01, PME-PME 0.05, PME-PLE 0.04, AME-PME 0.07, ALE-PLE 0.03. Epigynum (Figs. 71–72): LEM rounded, PEM absent, central orifice present. Leg spination: Mt I & II v0-0-0.

Male: Unknown.

Material examined: NAMIBIA: Windhoek, January 1920, R. W. Tucker, 39 (syntypes), SAMC B5247.

Distribution: Known only from the type locality (Map 6).



Figs. 67–72: **67–70** Zelotes otavi nom. nov. **67** Palp, ventral view; **68** Palp, retrolateral view; **69** Epigynum, ventral view; **70** Epigynum, dorsal view. **71–72** Zelotes pedimaculosus Tucker, 1923. **71** Epigynum, ventral view; **72** Epigynum, dorsal view. Scale line=0.2 mm.



Figs. 73–76: Zelotes tetramamillatus (Caporiacco, 1947). **73** Palp, ventral view; **74** Palp, retrolateral view; **75** Epigynum, ventral view; **76** Epigynum, dorsal view. Scale line=0.1 mm.

Zelotes tetramamillatus (Caporiacco, 1947) (Figs.73–76, Map 6)

Zavattarica tetramamillata Caporiacco, 1947: 189, pl. 2, fig. 40 (D²); Roewer, 1955: 473.

Zelotes tetramamillata: Platnick, 1992: 178–79. Zelotes tetramamillatus: Platnick, 2005.

Remarks: The male type of *Zelotes tullgreni* (Caporiacco, 1947) from Moshi, the type locality of *Z. tetramamillatus*, could not be found. However, his simplistic illustration (fig. 37) could be that of this species.

Diagnosis: Zelotes tetramamillatus can be distinguished by the truncated terminal apophysis and the enlarged dorsally curved retrolateral prong on the embolar base of the male palp (Fig. 73), and the short lateral margins and rough edges of the wide posterior margin of the female epigynum (Fig. 75). Colour: dark brown throughout, male with brown scutum.

Male: Total length 4.00. Carapace 1.67 long, 1.00 wide. Femur II length 0.83. Eye sizes and interdistances: AME 0.06, ALE 0.06, PME 0.06, PLE 0.07; AME-AME 0.02, AME-ALE 0.00, PME-PME 0.03, PME-PLE 0.02, AME-PME 0.04, ALE-PLE 0.02. Palp (Figs. 73–74): EMB short, retrolateral prong large, thickened and curving dorsally. Leg spination: Fe IV r0-0-1, p0-0-1; Mt II v2-2-0.

Female: Total length 4.17. Carapace 1.67 long, 1.00 wide. Femur II length 1.08. Eye sizes and interdistances: AME 0.06, ALE 0.06, PME 0.06, PLE 0.06; AME-AME 0.02, AME-ALE 0.00, PME-PME 0.03, PME-PLE 0.01, AME-PME 0.04, ALE-PLE 0.02. Epigynum (Figs. 75–76): PEM edges rough, LEM short and wide apart, MED short. Leg spination: Fe IV r0-0-1, p0-0-1. *Material examined*: TANZANIA: Ibaya Camp, Mkomazi Game

Reserve: 30 January 1996, A. Russell-Smith, 29, NMBZ A13577; April 1995, 5& 49, NMBZ A13578; Moshi, June–August 1905, 19 (holotype), HNHM.

Distribution: Known only from northern Tanzania (Map 6).

The tenuis group

Diagnosis: The *tenuis* group contains those species in which the median apophysis of the male bulb is distally situated and the spiral embolus is very short. The female ducts are short, simple and enlarged anteriorly.

Zelotes tenuis (L. Koch, 1866) (Figs. 77-80, Map 7)

Drassus tenuis L. Koch, 1866: 101, pl. 4, figs. 65–66 (D♂). Prosthesima pallida O. P.-Cambridge, 1874: 383–385, pl. 51, fig. 11a–b (D♂♀).



Figs. 77–80: Zelotes tenuis (L. Koch, 1866). 77 Palp, ventral view; 78 Palp, retrolateral view; 79 Epigynum, ventral view; 80 Epigynum, dorsal view. Scale line=0.2 mm.

Prosthesima circumspecta Simon, 1878: 94, pl. 14, figs. 26-27 (DdP).

Zelotes circumspectus: Simon, 1914: 157, figs. 295–296, 342–343; Denis, 1952: 123, fig. 20; Roewer, 1955: 447; Bonnet, 1959: 4917; Jézéquel, 1961: 604, fig. 27; Marinaro, 1967: 693; Ledoux, 1963: 100, fig. 1.

Prosthesima pyrethri Strand, 1915: 141 (Dð).

- Zelotes pallidus: Reimoser, 1919: 169; Dalmas, 1922: 85; Roewer, 1955: 454; Bonnet, 1959: 4938; Platnick & Shadab, 1983: 185–186, figs. 259–262; Di Franco, 1986: 143; 1992b: 225–226.
- Zelotes pyrethri: Reimoser, 1919: 171; Roewer, 1955: 457; Bonnet, 1959: 4946.
- Zelotes tenuis: Reimoser, 1919: 171; Roewer, 1955: 459; Platnick, 1989: 495; Melic, 1994: 114, figs. 3–5; Levy, 1998: 131–133, figs. 78–81; Platnick, 2005.

Drassodes tenuis: Bonnet, 1956: 1592.

Diagnosis: Zelotes tenuis is a distinctive species easily recognised by the expanded embolar base of males which wraps around the embolus retrolaterally (Figs. 77–78) and by the shape of the female epigynum (Figs. 79–80).

Male and female: See Platnick & Shadab (1983) and Levy (1998) for measurements.

Material examined: EGYPT: Alexandria, 18 19 (syntypes of pallidus), OXUM B267, t99, B332, t98.

Distribution: Egypt (Map 7), Israel, Crete, Yugoslavia, Italy, Corsica, France, Spain, USA.



Figs. 81–84: Zelotes tragicus (O. P.-Cambridge, 1872). 81 Palp, ventral view; 82 Palp, retrolateral view; 83 Epigynum, ventral view; 84 Epigynum, dorsal view. Scale line=0.2 mm.



Map 7: Distribution of Zelotes tenuis \blacktriangle , Z. tragicus \blacklozenge , Z. nilicola \bigtriangledown and Z. infumatus \blacktriangle in Africa.

Zelotes tragicus (O. P.-Cambridge 1872) (Figs. 81–84, Map 7)

Melanophora tragica O. P.-Cambridge, 1872: 243, pl. 16, fig. 22 (Dd). Prosthesima tragica: Simon, 1878: 98.

Zelotes tragicus: Reimoser, 1919: 171; Roewer, 1955: 459; Bonnet, 1959: 4957; Levy, 1998: 133–134, figs. 82–85 (&, D?); Platnick, 2005.

Diagnosis: The projection on the median apophysis and the apically spiral embolus of the male palp (Figs. 81–82) and the shape of the spermathecae and epigynal plate of the female (Figs. 83–84) distinguish *Z. tragicus* from other *Zelotes* species. Colour: dark brown throughout.

Male and female: See Levy, 1998.

Material examined: CHAD: Massif du Tibesti, July-October 1965, Y. Brandily, 13, MRAC 132.923. ETHIOPIA: Mt. Salale, July 1971, G. De Rougemont, 13, MRAC 158.915; Simien Mts., 23 October 1973, G. De Rougemont, 19, MRAC 158.907.

Distribution: Israel, Chad and Ethiopia (Map 7).

Zelotes quipungo sp. n. (Figs. 85-86, Map 8)

Type: Female holotype from Quipungo, Angola, 28 July 1925 (Vernay-Lang Expedition), deposited in AMNH (28500).

Etymology: The specific name is a noun in apposition taken from the type locality.

Diagnosis: The female epigynal plate of *Zelotes quipungo* has diagonal lateral margins, broad curved anterior margins, and simple ducts (Fig. 85), making this species easy to distinguish. *Zelotes quipungo* has been placed in this group because of the simple female ducts, but the placement is tentative until males are discovered. Colour: light brown throughout.

Female: Total length 5.66. Carapace 2.33 long, 1.67 wide. Femur II length 1.50. Eye sizes and interdistances: AME 0.10, ALE 0.11, PME 0.11, PLE 0.10; AME-AME 0.03, AME-ALE 0.01, PME-PME 0.02, PME-PLE 0.03, AME-PME 0.10, ALE-PLE 0.06. Epigynum (Figs. 85–86): LED diagonal, AEM enlarged, MED



Figs. 85–88: 85–86 Zelotes quipungo sp. n. 85 Epigynum, ventral view; 86 Epigynum, dorsal view. 87–88 Zelotes flavitarsis (Purcell, 1908). 87 Epigynum, ventral view; 88 Epigynum, dorsal view. Scale line=0.2 mm.

short and simple. Leg spination: Fe III & IV r0-0-1, p0-0-1; Ti II v1-1-0; Mt II v2-2-0.

Male: Unknown.

Material examined: Only the holotype.

Distribution: Known only from the type locality (Map 8).

Zelotes flavitarsis (Purcell, 1908) (Figs. 87-88, Map 8)

Melanophora flavitarsis Purcell, 1908: 238, pl. 11, fig. 21 (D^Q).

Zelotes flavitarsis: Tucker, 1923: 358; Giltay, 1935: 16; Roewer, 1955: 463; Bonnet, 1959: 4923; Griffin & Dippenaar-Schoeman, 1991: 166; Platnick, 2005.

Diagnosis: The single enlarged anterior margin, short straight lateral margins and enlarged lateral ducts of the epigynum distinguish *Zelotes flavitarsis* from the other species of *Zelotes. Zelotes flavitarsis* has tentatively been placed in this group until the discovery of males. Colour: specimens faded.

Female: Total length 4.58. Carapace 1.67 long, 1.42 wide. Femur II length 1.17. Eye sizes and interdistances: AME 0.06, ALE 0.05, PME 0.05, PLE 0.05; AME-AME 0.04, AME-ALE 0.01, PME-PME 0.03, PME-PLE 0.03, AME-PME 0.05, ALE-PLE 0.03. Epigynum (Figs. 87–88): AEM single, enlarged, LEM straight and short, LED bulbous. Leg spination: typical for genus.

Male: Unknown.

Material examined: SOUTH AFRICA: Komaggas, July-August 1904, L. Schultze, 2⁹ (syntypes), ZMHB 28646.

Distribution: Known only from the type locality (Map 8).

The caucasius group

Diagnosis: The *caucasius* group, identified by Levy (1998), contains mainly European and Levantine species. The males of this group have peculiar palps with an elongated and often coiled embolus with apical outgrowths. Females have a short, anteriorly situated, median plate and massive ducts.

Zelotes ngomensis sp. n. (Figs. 89-92, Map 8)

Types: Male holotype from Ngome State Forest, South Africa, September 1992 (M. van der Merwe), deposited in PPRI (94/694). Paratypes: same locality and collector: March 1992, 23 19, PPRI 94/698; June 1992, 23, PPRI 94/701; August 1992, 19, PPRI 94/696; 33, PPRI 94/697; December 1992, 19, PPRI 94/678.

Etymology: The specific name refers to the type locality.

Diagnosis: Males of *Zelotes ngomensis* are easily distinguished from *Z. nilicola* by the shorter curved embolus, rounded terminal apophysis and small median apophysis (Figs. 89–90 cf. Figs. 93–94). Females have a short tongue-like median plate on the epigynum and the lateral ducts are greatly enlarged, while the median ducts are indistinct (Figs. 91–92). Colour: dark brown throughout.

Male: Total length 3.50. Carapace 1.46 long, 1.08 wide. Femur II length 1.00. Eye sizes and interdistances: AME 0.05, ALE 0.05, PME 0.06, PLE 0.05; AME-AME 0.04, AME-ALE 0.01, PME-PME 0.04, PME-PLE 0.02,



Map 8: Distribution of Zelotes quipungo ■, Z. flavitarsis △, Z. aestus
▶, Z. aridus ▲, Z. corrugatus ● and Z. ngomensis △ in southern and eastern Africa.



Figs. 89–92: Zelotes ngomensis sp. n. 89 Palp, ventral view; 90 Palp, retrolateral view; 91 Epigynum, ventral view; 92 Epigynum, dorsal view. Scale line=0.2 mm.

AME-PME 0.05, ALE-PLE 0.03. Palp (Figs. 89–90): EMB short, TA strongly curved. Leg spination: typical for genus.

Female: Total length 3.58. Carapace 1.50 long, 1.08 wide. Femur II length 0.83. Eye sizes and interdistances: AME 0.07, ALE 0.07, PME 0.07, PLE 0.07; AME-AME 0.04, AME-ALE 0.005, PME-PME 0.05, PME-PLE 0.03, AME-PME 0.05, ALE-PLE 0.03. Epigynum (Figs. 91–92): MED indistinct, LED greatly enlarged. Leg spination: typical for genus.

Material examined: Only the types.

Distribution: Known only from the type locality (Map 8).

Zelotes nilicola (O. P.-Cambridge, 1874) (Figs.93–96, Map 7)

Prosthesima nilicola O. P.-Cambridge, 1874: 380–381, pl. 5, fig. 8 (Dδ). *Prosthesima tantula*: Simon, 1878: 88, pl. 14, fig. 21 (Dδ). *Prosthesima nilotica*: Simon, 1878: 99.

- Melanophora nilotica: Simon, 1893: 366
- Zelotes tantulus: Simon, 1914: 160, fig. 312.
- Zelotes nilicolus: Reimoser, 1919: 169.
- Zelotes nilicola: Dalmas, 1922: 84; Roewer, 1955: 454; Bonnet, 1959: 4937; Platnick & Shadab, 1983: 186–188, figs. 263–268 (&, D?); Melic, 1995: 179, figs. 1–2; Di Franco, 1992b: 225; Levy, 1998: 142–143, figs. 104–107; Platnick, 2005.

Diagnosis: Males of *Zelotes nilicola* have an enlarged process on the median apophysis, the embolus traverses the distal end of the bulb and then wraps around the cymbium retrolaterally, and has a filamentous outgrowth apically (Figs. 93–94). In ventral view the female epigynum is similar to that of *Z. ngomensis*, but can be distinguished by the distinct median ducts and smaller lateral ducts (Figs. 95–96 cf. Figs. 91–92). Very small species. Colour: light brown/orange throughout.

Male and female: See Platnick & Shadab (1983) and Levy (1998) for measurements.

Material examined: BURKINA FASO: Kouba, 25–27 October 1993, De Visscher & Balança, 2³, MRAC 207.622; 28 April 1993, 1³, MRAC 209855; Soulou, 7–8 August 1993, 1², MRAC 207.729; 9–20 August 1993, 1³, MRAC 207.710; 2³, MRAC 207.723. EGYPT: Alexandria, April 1864, 1³ 1² (syntypes), OXUM B267.

Distribution: Mediterranean region, Burkina Faso (Map 7) and southern California, USA. *Natural history*: See Levy (1998).

The infumatus group

Diagnosis: The *infumatus* group was identified by Levy (1998). The embolus of the male palp originates from near the base of the bulb, curves distally along the mesal side, and around apically. The tibia bears a low short apophysis. Females have small spermathecae that extend



Figs. 93–96: Zelotes nilicola (O. P.-Cambridge, 1874). 93 Palp, ventral view; 94 Palp, retrolateral view; 95 Epigynum, ventral view; 96 Epigynum, dorsal view. Scale line=0.2 mm.

medially into short recurved ducts. The epigynal plate has two small funnel-shaped openings.

Zelotes infumatus (O. P.-Cambridge, 1872) (Figs. 97–100, Map 7)

- Drassus infumatus O. P.-Cambridge, 1872: 238–239, pl. 15, fig. 16 (D♂♀).
- Drassodes citipes Simon, 1893: 362 (DQ); Roewer, 1955: 385.
- Drassodes lutorius Tullgren, 1910: 104 (in part), fig. 15b (DQ).
- Drassodes infunatus: Reimoser, 1919: 161; Roewer, 1955: 387; Bonnet, 1956: 1569.
- Camillina citipes: Berland, 1919: 462; Bonnet, 1956: 944.
- Camillina lutoria: Berland, 1919: 462; 1920: 108, figs. 125–127; Roewer, 1955: 411.
- Zelotes infumatus: Levy, 1998: 145–147, figs. 112–115 (3?); Platnick, 2005.

Remarks: The two female syntypes of *Drassodes lutorius* Tullgren (1910) are distinctly different specimens. *Drassodes lutorius* based on fig.15a (Tullgren, 1910) remains a valid *Zelotes* species, while Tullgrens' fig. 15b is a different species and was synonymised with *Z. infumatus* by Levy (1998).

Diagnosis: The mesally encircling embolus of the male palp, along with the short flat tibial apophysis, and the distinctive epigynal plate of the female (Figs. 97–100) easily distinguish *Zelotes infumatus* from all other *Zelotes* species. Colour: light brown/orange throughout.



Figs. 97–100: Zelotes infumatus (O. P.-Cambridge, 1872). 97 Palp, ventral view; 98 Palp, retrolateral view (after Levy, 1998); 99 Epigynum, ventral view; 100 Epigynum, dorsal view. Scale line=0.2 mm.

Male and female: See Levy (1998) for measurements. Material examined: TANZANIA: Mt. Meru, Y. Sjöstedt, 1^Q (syntype of *lutorius*), NREA.

Distribution: Israel, Egypt, Tanzania (Map 7). *Natural history*: See Levy (1998).

The corrugatus group

Diagnosis: The *corrugatus* group contains those species in which males have a short embolar base, a transverse embolus extending across the distal edge of the palpal bulb, and a median apophysis situated centrally on the bulb with the process facing prolaterally. Females have a single anterior margin like the *laetus* and *humilis* groups, but have transverse ridges between the lateral and anterior margins. The epigynum is also somewhat elongated.

Zelotes aestus (Tucker, 1923) comb. n. (Figs. 101–104, Map 8)

Camillina aestus Tucker, 1923: 335–336, pl. 9, fig. 55 (D²); Bonnet, 1956: 943; Griffin & Dippenaar-Schoeman, 1991: 165; Van den Berg & Dippenaar-Schoeman, 1991: 248; Platnick, 2005.

Camillina aesta: Roewer, 1955: 410.

Diagnosis: Zelotes aestus is similar to Z. corrugatus but lacks the prong on the embolus of the male palp (Figs. 101–102 cf. Figs. 109–110), and the lateral and posterior margins of the female epigynum are straight and there are fewer ridges than in Z. corrugatus (Figs. 103–104 cf. Figs. 111–112). Colour: carapace and legs light brown, patellae and tibiae darker, abdomen grey.

Male: Total length 3.33. Carapace 1.67 long, 1.25 wide. Femur II length 0.83. Eye sizes and interdistances: AME 0.06, ALE 0.06, PME 0.10, PLE 0.07; AME-AME 0.05, AME-ALE 0.01, PME-PME 0.02, PME-PLE 0.03, AME-PME 0.04, ALE-PLE 0.02. Palp (Figs. 101–102): EMB longer than in *Z. corrugatus,* lacking embolar prong. Leg spination: Pa III p0-1-0, IV r0-1-0; Ti I v2-2-2, II v2-2-2, III r 2-1-1, p2-1-1, IV r2-1-1, p2-1-1; Mt I & II v2-2-0.

Female: Total length 4.00. Carapace 1.89 long, 1.47 wide. Femur II length 0.89. Eye sizes and interdistances: AME 0.08, ALE 0.08, PME 0.10, PLE 0.09; AME-AME 0.03, AME-ALE 0.01, PME-PME 0.02, PME-PLE 0.02, AME-PME 0.06, ALE-PLE 0.03. Epigynum (Figs. 103–104): LEM and PEM straight. Leg spination: Fe IV r0-0-1, p0-0-1; Pa III p0-1-0, IV r0-1-0; Ti III r2-1-1, p2-1-1, IV r2-1-1, p2-1-1; Mt I & II v2-2-2.

Material examined: NAMIBIA: Bloubokdraai, 13 October-15 November 1986, E. Griffin, 19, SMWN 39589; Bulls Poorte, 27 December 1915, R. W. Tucker, 19, SAMC B2050; Nomptsas, 23 December 1915, R. W. Tucker, 19 (holotype), SAMC B2135; Ondundozonananduna Mts, 30 November 1986, E. Griffin, 1å, SMWN 39709; Ongava, March 1997, A. Russell-Smith, 1å, SMWN; Otjiku 192, 16–29 November 1988, E. Marais, 1å 19, SMWN 42100; Panner Gorge, 13 March–4 April 1989, E. Griffin, 19, SMWN 36963; 13 March–9 April 1989, 19, SMWN 38082; 9 April–8 May 1989, 19, SMWN 3707; 18 May–5 June 1989, 19, SMWN 38055; 3–28 August 1989, 4å 19 3juvs., SMWN 38239; 26 September 1989, 1å, SMWN 39027; 28 September–22 October 1989, 2å 19, SMWN 38348; 20 November–18 December 1989, 19, SMWN 38483.

Distribution: Known only from Namibia (Map 8).



Figs. 101–104: Zelotes aestus (Tucker, 1923). 101 Palp, ventral view; 102 Palp, retrolateral view; 103 Epigynum, ventral view; 104 Epigynum, dorsal view. Scale line=0.2 mm.

Zelotes aridus (Purcell, 1907) comb. n. (Figs. 105–108, Map 8)

Melanophora arida Purcell, 1907: 333, pl. 15, fig. 65 (D^Q). *Prosthesima arida*: Tullgren, 1910: 109–110, fig. 23.

Camillina arida: Tucker, 1923: 338–339; Roewer, 1955: 410; Bonnet, 1956: 943; Platnick, 2005.

Diagnosis: Males of *Zelotes aridus* differ from those of *Z. aestus* and *Z. corrugatus* by the longer embolus and larger median apophysis (Figs. 105–106 cf. Figs. 101–102 and 109–110), and females differ in the longer, highly coiled ducts, and the lateral epigynum margins join anteriorly while the posterior margin is not clearly defined (Figs. 107–108 cf. Figs. 103–104 and 111–112). Colour: carapace and legs light brown, patellae and tibiae darker, abdomen grey.

Male: Total length 4.66. Carapace 2.16 long, 1.50 wide. Femur II length 1.16. Eye sizes and interdistances: AME 0.10, ALE 0.10, PME 0.10, PLE 0.10; AME-AME 0.04, AME-ALE 0.01, PME-PME 0.03, PME-PLE 0.03, AME-PME 0.05, ALE-PLE 0.03. Palp (Figs. 105–106): EMB without basal prong, longer than in *aestus* and *corrugatus*, MA larger. Leg spination: Fe IV r0-0-1, p0-0-1; Pa III p0-1-0, IV r0-1-0; Ti I v0-2-2, II v1-2-2, III r1-1-1, IV p1-1-2, p2-1-1; Mt I v2-2-0, II v2-2-0, III r2-2-2.

Female: Total length 4.83. Carapace 2.19 long, 1.58 wide. Femur II length 1.11. Eye sizes and interdistances: AME 0.10, ALE 0.10, PME 0.10, PLE 0.10; AME-AME 0.05, AME-ALE 0.01, PME-PME 0.03, PME-PLE 0.03, AME-PME 0.05, ALE-PLE 0.03. Epigynum (Figs. 107–



Figs. 105–108: Zelotes aridus (Purcell, 1907). 105 Palp, ventral view; 106 Palp, retrolateral view; 107 Epigynum, ventral view; 108 Epigynum, dorsal view. Scale line=0.2 mm.

108): MED long and coiled, LEM joining anteriorly. Leg spination: Fe IV r0-0-1, p0-0-1; Pa III p0-1-0, IV r0-1-0; Ti III r2-1-1, IV r2-1-1, p2-1-1; Mt I v0-0-0, II v2-2-0.

Material examined: NAMIBIA: Dassiefontein 87, 7–27 November 1992, E. Marais, 2º, SMWN 42757; 50 km E of Gobabeb: 27 February–27 March 1979, B. Wharton, 1º, CASC; 28 March–22 April 1979, 1º, CASC. SOUTH AFRICA: Karoo National Park, December 1986–March 1987, museum staff, 2º, BMSA 2045; Laingsburg, W. F. Purcell, 1º (holotype), SAMC 13247; Roedtan, 12 September 2002, M. van Jaarsveld, 1ð, PPRI 2003/229; Tuinplaas: 13 September 2001, M. van Jaarsveld, 1ð, PPRI 2003/408; 11 October 2001, 1º, PPRI 2003/ 313; 20 August 2002, 1ð, PPRI 2003/816; 21 August 2002, 1ðº, PPRI 2003/798. TANZANIA: Mt. Meru, January 1906, Y. Sjöstedt, 1º, NREA.

Distribution: Known from Namibia, South Africa and Tanzania (Map 8).

Zelotes corrugatus (Purcell, 1907) comb. n. (Figs. 109–112, Map 8)

Melanophora corrugata Purcell, 1907: 332–333, pl. 15, figs. 63–64 (D&9); 1908: 239; Eagle, 1985: 136.

Camillina corrugata: Tucker, 1923: 342–343; Lawrence, 1928: 232; Roewer, 1955: 411; Bonnet, 1956: 944; Lawrence, 1962: 199; 1965: 11; Russell-Smith, 1981: 153; Eagle, 1985: 136; Griffin & Dippenaar-Schoeman, 1991: 165; Whitmore *et al.*, 2001: 14; Platnick, 2005.

Diagnosis: Zelotes corrugatus is similar to *Z. aestus,* but males can be distinguished by the short embolus which has a prong prolaterally (Figs. 109–110 cf. Figs. 101–102), and females by the rounded lateral and posterior epigynal margins, and very elongated epigynum with many transverse ridges (Figs. 111–112 cf. Figs. 103–104). Colour: carapace and legs light brown, patellae and tibiae darker, abdomen grey.

Male: Total length 5.39. Carapace 2.47 long, 1.77 wide. Femur II length 1.28. Eye sizes and interdistances: AME 0.10, ALE 0.10, PME 0.12, PLE 0.10; AME-AME 0.04, AME-ALE 0.01, PME-PME 0.02, PME-PLE 0.03, AME-PME 0.06, ALE-PLE 0.04. Palp (Figs. 109–110):

EMB shorter than in *Z. aestus*, with prolateral prong. Leg spination: Pa III p0-1-0, IV r0-1-0; Ti I v1-2-2, II v1-2-2, III r2-1-1, p2-1-1, IV r2-1-1, p2-1-1; Mt I & II v2-2-0.

Female: Total length 6.31. Carapace 2.83 long, 1.89 wide. Femur II length 1.28. Eye sizes and interdistances: AME 0.10, ALE 0.10, PME 0.12, PLE 0.10; AME-AME 0.04, AME-ALE 0.01, PME-PME 0.02, PME-PLE 0.02, AME-PME 0.08, ALE-PLE 0.05. Epigynum (Figs. 111–112): LEM and PEM rounded, many transverse ridges on elongated epigynum. Leg spination: Fe IV r0-0-1, p0-0-1; Pa III p0-1-0, IV r0-1-0; Ti III r1-1-1, p2-1-1, IV r2-1-1, p2-1-1; Mt I v0-0-0.

Material examined: NAMIBIA: Andoni South Etosha National Park, 9-13 November 1996, A. Russell-Smith, 2d 19, SMWN; Bloubokdraai, 10 August-14 September 1987, E. Griffin, 3ð 29, SMWN 40639; Chamais, February 1925, 29, SAMC B6687; Sesfontein, February 1925, 1º, SAMC B6662; 1º, SAMC B6750; Swakopmund, February 1920, R. W. Tucker, 19, SAMC B4833; Tsumeb, December 1919, R. W. Tucker, 19, SAMC C3069; Windhoek, February 1920, R. W. Tucker, 19, SAMC B5248; January 1920, 29, SAMC B5508. SOUTH AFRICA: Bingap 184, Hay, 4-26 September 1982, museum staff, 23 19, BMSA 048; 23, BMSA 030; 1d, BMSA 025; De Aar, 17-26 September 1910, W. F. Purcell, 19, SAMC B1580; Deelfontein 482, August-October 1986, museum staff, 19, BMSA 1900; 38, BMSA 1901; Eierfontein, December 1901-February 1902, S. C. Schreiner, 19, SAMC 11973; Florisbad: October 1984, L. Lotz, 13, BMSA 630; September 1985, 33, BMSA 1071; 23, BMSA 1059; 21 October 1985, 83 59, ex BMSA 1137; 9-23 November 1987, 23, BMSA 3437; 13, ex BMSA 3402; 13, ex BMSA 3416; 13 19, BMSA 3440; 2ð, BMSA 3410; 1ð, BMSA 3399; 1ð, ex BMSA 3497; 1ð 19, BMSA 3453; 2ð, BMSA 3394; 1ð, BMSA 5276; 29, BMSA 5292; 23 November-8 December 1987, 13, BMSA 3560; 13, ex BMSA 3625; 29, BMSA 3565; 13, BMSA 3617; 13, ex BMSA 3511; 8-21 December 1987, 19, BMSA 3688; 13 19, ex BMSA 3678; 25 December 1987-5 January 1988, 19, ex BMSA 3579; 19, ex BMSA 3795; 19, BMSA 3811; 31 October-18 November 1988, 28, BMSA 5191; 1ð, BMSA 5201; 1ð, BMSA 5172; Hanover: October 1881, S. C. Schreiner, 13 79 (syntypes), SAMC 9478; November 1901, 13 39, SAMC 11774; December 1901, 49, SAMC 11790; December 1901-January 1902, 19, SAMC 11823; October 1905, W. F. Purcell, 19, SAMC B1519; Johannesburg, September 1905, W. F. Purcell, 38 19, SAMC 150,647; Kalahari Gemsbok Park, September-November 1989,



Figs. 109–112: Zelotes corrugatus (Purcell, 1907). 109 Palp, ventral view; 110 Palp, retrolateral view; 111 Epigynum, ventral view; 112 Epigynum, dorsal view. Scale line=0.2 mm.

L. Lotz, 16 19, BMSA 5337; Kimberley: November 1918, J. M. Power, 19, SAMC B4214; November 1987, museum staff, 13 19, BMSA 2907; November 1987-March 1988, 16 29, BMSA 2918; Klein Kariba, 24-28 November 1996, L. Lotz, 19, BMSA 8169; Kromrant, 27 November 1985, museum staff, 29, BMSA 1243; Krugersdrift Dam, January 1987, L. Lotz, 19, BMSA 1995; Kuruman, July 1903, 19, SAMC 13182; Makalali, February–December 1999, C. Whitmore, 19, DMSA 406; 49, DMSA 400; Poortjiesfontein: 1905, Neeser Jnr, 18 19, SAMC 1608; 23 49, SAMC 14495; Vlagkop, October 1901, S. C. Schreiner, 29, SAMC 9492; Warmbaths, September 1905, W. F. Purcell, 13 29, SAMC 150,663; Weenen, 10 October 1925, R. E. Symons, 13, TMSA 6475. ZAMBIA: Siakaunda Mt., 4 August 1994, F. Nyathi, 29, NMBZ A11235. ZIMBABWE: Bumboosi Gorge, 12 August 1985, F. Nyathi, 19, NMBZ A3632; 8 August 1985, 19, NMBZ A3550; Chikwarakwara, 12-15 October 1999, F. Cotterill, 19, NMBZ A13467; Chisuma Clinic, 1-3 August 1990, F. Nyathi, 19, NMBZ A8467; Detema Stream, 31 August 1985, J. M. Sango, 13, NMBZ A7387; Glenmore Farm, 26 September 1988, F. Nyathi, 1º, NMBZ A6993; Gonono School, 28-31 March 1997, F. Nyathi, 108, NMBZ A13007; Katombora Rapids: 2 September 1986, Falcon College & museum staff, 39, NMBZ A5123; 25 August 1986, 19, NMBZ A4708; 23, NMBZ A7403; 28 August 1986, 29, NMBZ A7406; 30 August 1986, 39, NMBZ A7409; Mpindo, 6 September 1984, D. Adams, 1d, NMBZ A2430; Mpofu, 13 September 1984, D. Adams, 13, NMBZ A7370; 4 October 1984, 19, NMBZ A2441; Reps School, 22 October 1979, S. Higgins, 19, NMBZ A496; Sawmills, 17 September 1999, F. Nyathi, 19, NMBZ A14018; Teakland Siding, 28 September 1984, D. Adams, 13 19, NMBZ A2439.

Distribution: Southern Africa (Map 8).

Natural history: Seasonal adult activity mainly during August–November.

The zonognathus group

Diagnosis: Males of the *zonognathus* group can be identified by the simple, roundish palpal bulb with sloping terminal apophysis, and embolus that originates distally and extends forwards over the distal end of the bulb. Females have thin median ducts and greatly enlarged lateral ducts, with small anteriorly situated openings.

Zelotes lavus Tucker, 1923 (Figs. 113–116, Map 9)

Zelotes lava Tucker, 1923: 363, pl. 9, fig. 69b (D^Q).

Zelotes lavus: Giltay, 1935: 17; Roewer, 1955: 464; Bonnet, 1959: 4931; Dippenaar-Schoeman *et al.*, 1999: 36; Platnick, 2005.

Zelotes laevus: Van den Berg & Dippenaar-Schoeman, 1991: 248.

Diagnosis: Males of *Zelotes lavus* have a shorter embolus and more rounded bulb than *Z. zonognathus* (Fig. 113 cf. Fig. 117), while females can be distinguished by the lateral margins of the epigynal plate being centrally placed and by the large bulbous lateral ducts (Figs. 115–116 cf. Figs. 119–120). Colour: carapace and legs brown, femora darker brown.

Male: Total length 4.29. Carapace 2.08 long, 1.45 wide. Femur II length 1.25. Eye sizes and interdistances: AME 0.06, ALE 0.07, PME 0.08, PLE 0.07; AME-AME 0.02, AME-ALE 0.01, PME-PME 0.06, PME-PLE 0.03, AME-PME 0.06, ALE-PLE 0.04. Palp (Figs. 113–114): EMB short, bulb rounded. Leg spination: typical for genus.

Female: Total length 4.61. Carapace 1.89 long, 1.36 wide. Femur II length 1.08. Eye sizes and interdistances:

AME 0.07, ALE 0.07, PME 0.09, PLE 0.08; AME-AME 0.03, AME-ALE 0.01, PME-PME 0.03, PME-PLE 0.03, AME-PME 0.05, ALE-PLE 0.03. Epigynum (Figs. 115–116): LED close together, MED twisted, LED greatly expanded. Leg spination: typical for genus.

Material examined: NAMIBIA: RTZ Gorge, 11-16 April 1997, E. Griffin, 18, SMWN 43640; Skorpion Mine, 24 July 1997, E. Griffin, 19, SMWN 43728. SOUTH AFRICA: Barberspan, 5 April 1987, M. Filmer, 1º, PPRI 87/508; Beaufort West, 29 October 1905, W. F. Purcell, 19 (holotype), SAMC B1941; Benfontein, November 1981, S. Erasmus, 13, PPRI 82/410; Boshof Table Farm, April-August 1987, museum staff, 19, BMSA 2096; De Aar, 17-26 September 1913, W. F. Purcell, 19, SAMC B1579; Florisbad, 16-30 March 1988, L. Lotz, 13, ex BMSA 4281; Langberg 138: April-August 1987, museum staff, 19, BMSA 2124; July-September 1988, 18, BMSA 2937; Preil 281, July 1986, museum staff, 19, BMSA 1865; Reitondale Research Station: 5 May 1986, A. van den Berg, 19, PPRI 86/55; M. Botha, 2 June 1986, 19, PPRI 89/1110; 10 June 1986, A. van den Berg, 19, PPRI 86/138; 16 June 1986, 19, PPRI 86/186; 19, PPRI 89/1087; 9 July 1987, 19, PPRI 87/807; 10 September 1987, 19, PPRI 88/23; 10 May 1988, 33 89, PPRI 88/455; 17 May 1988, 49, PPRI 88/468; 13 29, ex PPRI 88/475; 24 May 1988, A. Briggs & C. Canard, 19, PPRI 88/453; 59, PPRI 88/296; 7 June 1988, 19, PPRI 88/439; 21 June 1988, 29, PPRI 89/442; 6 July 1988, 19, PPRI 88/688; 19, PPRI 89/443; 2 August 1988, 19, PPRI 88/694; 19, PPRI 89/446; 19, PPRI 88/700; 16 August 1988, 19, PPRI 88/726; 6 September 1988, 19, PPRI 89/147; 9 August 1989, 19, PPRI 89/1002; Roodepoort, 12 May 1980, A. Leroy, 19, PPRI 81/220; Settlers Farm: 10 May 2001, M. van Jaarsveld, 18, PPRI 2003/69; 24 May 2001, 19, PPRI 2003/72; 7 May 2002, 13, PPRI 2003/71; 19,



Figs. 113–116: Zelotes lavus Tucker, 1923. **113** Palp, ventral view; **114** Palp, retrolateral view; **115** Epigynum, ventral view; **116** Epigynum, dorsal view. Scale line=0.1 mm.

PPRI 2003/548; 11 June 2002, 19, PPRI 2003/549; 3 July 2002, 19, PPRI 2003/550; 19, PPRI 2003/649; 24 July 2002, 19, PPRI 2003/560; 17 September 2002, 19, PPRI 2003/446; 19, PPRI 2003/682. ZIMBA-BWE: Insiza, G. French, 19, SAMC B3886.

Distribution: Southern Africa (Map 9).

Natural history: Main adult activity during June–September.

Zelotes zonognathus (Purcell, 1907) (Figs. 117–120, Map 9)

Melanophora zonognathus Purcell, 1907: 331, pl. 15, figs. 58–59 (Dざ♀). Zelotes zonognatha: Tucker, 1923: 378.

Zelotes zonognathus: Roewer, 1955: 466; Bonnet, 1959: 4959; Platnick, 2005.

Diagnosis: The male embolus of *Zelotes zonognathus* is very long, curving across the bulb, which is more elongated than in *Z. lavus* (Fig. 117 cf. Fig. 113). The lateral margins of the female epigynal plate are close to the anterior margins, and the lateral ducts are enlarged and fused together (Figs. 119–120). Colour: carapace light brown, legs darker brown, abdomen grey.

Male: Total length 5.33. Carapace 2.67 long, 2.33 wide. Femur II length 1.67. Eye sizes and interdistances: AME 0.08, ALE 0.10, PME 0.10, PLE 0.10; AME-AME



Figs. 117–120: Zelotes zonognathus (Purcell, 1907). **117** Palp, ventral view; **118** Palp, retrolateral view; **119** Epigynum, ventral view; **120** Epigynum, dorsal view. Scale line=0.2 mm.



Map 9: Distribution of Zelotes lavus \blacktriangle and Z. zonognathus \blacktriangleleft in Africa.

0.02, AME-ALE 0.01, PME-PME 0.05, PME-PLE 0.05, AME-PME 0.05, ALE-PLE 0.02. Palp (Figs. 117–118): EMB very long, coiled anteriorly. Leg spination: Mt I v0-0-0.

Female: Total length 5.25. Carapace 2.08 long, 1.67 wide. Femur II length 1.17. Eye sizes and interdistances: AME 0.08, ALE 0.10, PME 0.08, PLE 0.10; AME-AME 0.03, AME-ALE 0.01, PME-PME 0.05, PME-PLE 0.02, AME-PME 0.08, ALE-PLE 0.04. Epigynum (Figs. 119–120): LEM close to AEM, enlarged LED fused together. Leg spination: Mt I v0-0-0.

Material examined: DEMOCRATIC REPUBLIC OF CONGO: Lulimbi, July-August 1976, M. Lejeune, 13, MRAC 168.942. IVORY COAST: Kossou, 28 April 1975, R. Jocqué, 13, MRAC 152.486. MALI: Goundam, March 1979, W. H. Settle, 19, CASC. NAMIBIA: Ongava, March 1997, A. Russell-Smith, 13, SMWN. SOUTH AFRICA: Brits, 1984-1986, R. Watmough, 2d, ex PPRI 87/20; Eierfontein, December 1901-February 1902, S. C. Schreiner, 4º (syntypes), SAMC 13883; 4d (syntypes), SAMC 11971; Florisbad: 16-30 March 1988, L. Lotz, 18, BMSA 4291; 30 March-26 April 1988, 23, BMSA 4340; 26 April-10 May 1988, 13, BMSA 4383; 30 August-12 September 1988, 13, BMSA 4871; 13, BMSA 4872; 23 September-6 October 1988, 13, ex BMSA 5028; 31 October-18 November 1988, 13, BMSA 5249; 23 November-8 December 1987, 18, ex BMSA 3625; Krugersdriftdam, 28 August 1985, museum staff, 1d, ex BMSA 2026; Roedtan, M. van Jaarsveld, May 2002, 1d, PPRI 2003/312; Settlers Farm: M. van Jaarsveld, 6 February 2001, 18, PPRI 2003/311; 7 May 2002, 13, PPRI 2003/518; 13, PPRI 2003/519; 29 May 2001, 13, PPRI 2003/520; 23 July 2002, 19, PPRI 2003/288; 19, PPRI 2003/290; 12 September 2002, 19, PPRI 2003/274. ZIMBABWE: 7 km E of Mushumbi Pool, 22-25 March 1997, F. Nyathi, 13, NMBZ A13167; Rifa Conservation Camp, 4-8 December 1995, Girls College & museum staff, 18, NMBZ A13304.

Distribution: Probably occurs throughout the Afrotropical Region (Map 9).



Figs. 121–124: Zelotes butarensis sp. n. 121 Palp, ventral view; 122 Palp, retrolateral view; 123 Epigynum, ventral view; 124 Epigynum, dorsal view. Scale line=0.2 mm.

The butarensis group

Diagnosis: Males of the *butarensis* group can be identified by the broad embolar base with retrolateral extensions, and short, curved, broadened embolus. Females have short lateral margins to the epigynal plate. Median ducts are short, curved and connected anteriorly.

Zelotes butarensis sp. n. (Figs. 121-124, Map 10)

Types: Male holotype and 1° paratype from Butare, Rwanda, June 1971 (P. Nyalugaka), deposited in MRAC (139.124).

Etymology: The specific name refers to the type locality.

Diagnosis: Males of *Zelotes butarensis* are easily distinguished by the short curved embolus, broad embolar base with pointed retrolateral extension and more proximal broad extension clearly visible in retrolateral view (Figs. 121–122). Females have straight posterior and lateral margins of the epigynal plate and the median ducts are connected (Figs. 123–124). Colour: dark brown throughout. *Male*: Total length 5.88. Carapace 2.54 long, 2.08 wide. Femur II length 1.67. Eye sizes and interdistances: AME 0.09, ALE 0.10, PME 0.12, PLE 0.10; AME-AME 0.05, AME-ALE 0.01, PME-PME 0.06, PME-PLE 0.05, AME-PME 0.10, ALE-PLE 0.03. Palp (Figs. 121–122): EMB short and curved, with broad extension at base, retrolateral embolar process long and straight. Leg spination: Ti II v0-1-0, III r1-1-1.

Female: Total length 7.00. Carapace 2.42 long, 1.92 wide. Femur II length 1.45. Eye sizes and interdistances: AME 0.08, ALE 0.10, PME 0.10, PLE 0.09; AME-AME 0.05, AME-ALE 0.01, PME-PME 0.06, PME-PLE 0.05, AME-PME 0.08, ALE-PLE 0.04. Epigynum (Figs. 123–124): MED connected anteriorly, PEM and LEM straight. Leg spination: typical for genus.

Other material examined: CAMEROON: Mt. Cameroon, 15 May 1949, B. Malkin, 13, CALC. DEMOCRATIC REPUBLIC OF CONGO: Masako, 19–27 January 1988, L. De Vos, 13 29, MRAC 169.353; Rutshuru, May 1937, J. Ghesquière, 13, MRAC 027.462; Visiki Forest, 28 December 1971, R. P. M. Lejeune, 19, MRAC 140.890. KENYA: Kaibos, 19 August–6 September 1984, J. Murphy, 33 19, JM 11911; Kitale, August 1984, J. Murphy, 13 19, JM 12000. NIGERIA: Obudu Plateau, 3 December 1974, A. Russell-Smith, 13, BMNH. SUDAN: Gilo Imatang Mts., 21 December 1961, J. L. Cloudsley-Thompson, 19, MRAC 122.582.

Distribution: Central Africa (Map 10).

Zelotes lubumbashi sp. n. (Figs. 125-126, Map 10)

Type: Female holotype from Lubumbashi, Katanga, Democratic Republic of Congo, May 1968 (G. Goffinet), deposited in MRAC (134.213).

Etymology: The specific name is a noun in apposition taken from the type locality.

Diagnosis: Zelotes lubumbashi can be distinguished from Z. butarensis by the curved posterior and lateral margins of the epigynal plate and the coiled median ducts (Figs. 125–126 cf. Figs. 123–124). Colour: brown throughout.

Female: Total length 10.00. Carapace 4.17 long, 2.92 wide. Femur II length 2.50. Eye sizes and interdistances: AME 0.10, ALE 0.10, PME 0.12, PLE 0.10; AME-AME 0.08, AME-ALE 0.02, PME-PME 0.08, PME-PLE 0.05, AME-PME 0.12, ALE-PLE 0.06. Epigynum



Map 10: Distribution of *Zelotes butarensis* ● and *Z. lubumbashi* ■ in central Africa.



Figs. 125–126: Zelotes lubumbashi sp. n. **125** Epigynum, ventral view; **126** Epigynum, dorsal view. Scale line=0.2 mm.

(Figs. 125–126): MED connected anteriorly, PEM and LEM curved. Leg spination: Mt I & II v2-2-0.

Male: Unknown.

Material examined: Only the holotype.

Distribution: Known only from the type locality (Map 10).

The bastardi group

Diagnosis: Males of the *bastardi* group can be identified by the broad embolar base with broadened retrolateral extensions, and very broad prolateral extensions. The terminal apophysis is truncated and the embolus extremely broad and short. Females have enlarged lateral ducts and transverse median ducts. Anterior margins of the epigynal plate are broad.

Zelotes bastardi (Simon, 1896) (Figs. 127-130, Map 11)

Melanophora bastardi Simon, 1896: 334 (Dº).

- Zelotes vespertilionis Tucker, 1923: 376–377, pl. 11, fig. 79a–b (DδΨ); Giltay, 1935: 18; Roewer, 1955: 466; Bonnet, 1959: 4958; Platnick, 2005. **Syn. n.**
- Zelotes bastardi: Roewer, 1955: 462; Bonnet, 1959: 4914; Platnick & Murphy, 1987: 2, figs. 47–48; Platnick, 1989: 490; 2005.

Remarks: The examined types of *Z. bastardi* and *Z. vespertilionis* clearly belong to the same species, thus *Z. vespertilionis* is considered a junior synonym of *Z. bastardi*.

Diagnosis: Zelotes bastardi is easily identified by the enlarged embolar base and short, very broad embolus of the male palp (Figs. 127–128), and by the sclerotised epigynal plate of the female (Fig. 129). Colour: carapace and legs brown, abdomen grey, male with brown scutum.

Male: Total length 8.83. Carapace 3.92 long, 2.78 wide. Femur II length 2.31. Eye sizes and interdistances: AME 0.12, ALE 0.15, PME 0.15, PLE 0.15; AME-AME 0.07, AME-ALE 0.01, PME-PME 0.05, PME-PLE 0.05, AME-PME 0.15, ALE-PLE 0.07. Palp (Figs. 127–128): EMB short and broad, retrolateral embolar process pointed, prolateral embolar process broad and finger-like. Leg spination: Ti III r1-1-1, IV 2-1-1; Mt I & II 2-1-0.

Female: Total length 9.25. Carapace 3.69 long, 1.97 wide. Femur II length 2.31. Eye sizes and interdistances: AME 0.12, ALE 0.12, PME 0.15, PLE 0.12; AME-AME 0.08, AME-ALE 0.02, PME-PME 0.08, PME-PLE 0.07, AME-PME 0.15, ALE-PLE 0.07. Epigynum (Figs. 129–130): Epigynal plate sclerotised, LED enlarged, MED transverse and wide in diameter. Leg spination: Ti III r1-1-1, IV r2-1-1; Mt I & II v2-1-0.

Material examined: DEMOCRATIC REPUBLIC OF CONGO: Katanga, 17 June 1963, 13, MRAC 128.308. MADAGASCAR: Majunga, May 1896, M. Bastard, 1º (holotype of bastardi), MNHN. SOUTH AFRICA: Tshipse Hot Springs, August 1979, C. A. Car, 19, NMBZ A783. ZIMBABWE: Bulawayo: April 1979, D. Wheeler, 13, NMBZ A873; 15 July 1979, C. A. Car, 1d, NMBZ A2; 14 September 1979, A. Thompson, 29, NMBZ A221; 19 January 1985, Mr Bennefield, 1º, NMBZ A2751; 28 April 1986, A. Harmsworth, 1º, NMBZ A4681; November 1990, V. D. & B. Roth, 19, CASC; 11 November 1992, M. FitzPatrick, 13, NMBZ A10328; 26 April 1993, 13, NMBZ A10479; February 1999, 29, NMBZ A13841; 4 February 1999, 18, NMBZ A13893; March 1999, 19, NMBZ A13809; Chipangali, 3 September 1980, C. A. Car, 19, NMBZ A1417; Dwala Ranch, 28 November 1993, Raleigh International, 19, NMBZ A10774; 19, NMBZ A10775; Harare: April 1917, R. W. E. Tucker, 2ð 2º (syntypes of vespertilionis), SAMC B3095; 2º, SAMC B3212; 1ð, SAMC B3252; July-September 1917, J. O'Neill, 29, SAMC B3864; May 1999, M. Cumming, 19, NMBZ A13471; April 1999, 88 19, NMBZ A13470; Haroni, 26 June 1991, C. T. Masango, 19, NMBZ A9122; Insiza, G. French, 19, SAMC B3889; Iron Mine Uplands,



Figs. 127–130: Zelotes bastardi (Simon, 1896). 127 Palp, ventral view; 128 Palp, retrolateral view; 129 Epigynum, ventral view; 130 Epigynum, dorsal view. Scale line=0.2 mm.



Map 11: Distribution of *Zelotes bastardi* \bullet , *Z. haroni* \bigcirc , *Z. mkomazi* \triangleright , *Z. ibayensis* \bigtriangledown , and *Z. murphyorum* \blacktriangle in Africa.

16 January 1985, G. Allen, 1*ð*, NMBZ A7385; Kazuma Forestry Camp, 17 April 1988, Falcon College and museum staff, 1*ð* 1*♀*, NMBZ A6700; 1*♀*, NMBZ A12829; Makashi Dam Wall, 29 November 1993, Raleigh International, 1*♀*, NMBZ A10868; 27 November 1993, 2*♀*, NMBZ A10918; Maleme Rest Camp, 3 February 1987, J. Minshull, 1*♀*, NMBZ A5544; 10 February 1988, 2*♀*, NMBZ A6359; 17 February 1996, Girls College & museum staff, 1*♀*, NMBZ A12871; Marivalle Farm Dam 13, 4 December 1999, Girls College & museum staff, 2*♀*, NMBZ A13661; Mavuradohna Wilderness Area, 24 August 1989, J. Minshull, 1*♀*, NMBZ A7904; Mawa, Matobo National Park, 7 February 1993, Girls College & museum staff, 1*♀*, NMBZ A10618; Nyapfuta, 13 April 1993, F Nyathi, 1*♀*, NMBZ A10158; 17 mi NE of Zimbabwe Ruins, 20 March 1959, 1*♀*, CASC; N of Zvishavane, 27 April 1971, T. Payne, 1*ð*, NMBZ A1462; 1*ð*, NMBZ A1463.

Distribution: Madagascar, D.R.C., Zimbabwe, northern South Africa (Map 11).

Zelotes haroni sp. n. (Figs. 131–134, Map 11)

Types: Female holotype from Haroni Forest, Zimbabwe, 18–21 September 1995 (M. FitzPatrick), deposited in NMBZ (A12198). Paratypes: 2♂ from Katiyo Tea Estates, 2–4 May 1996 (F. Nyathi), deposited in NMBZ (A13565).

Etymology: The specific name is a noun in apposition taken from the type locality.

Diagnosis: Males of *Zelotes haroni* are easily distinguished by the winged prolateral extension and bifid retrolateral extension on the broad embolar base, and short curved embolus with a bifid tip (Figs. 131–132). Females have narrow median ducts surrounded by darkened areas, and long lateral margins of the epigynal plate (Figs. 133–134). Colour: brown throughout.

Male: Total length 5.83. Carapace 2.71 long, 2.04 wide. Femur II length 1.88. Eye sizes and interdistances: AME 0.10, ALE 0.10, PME 0.10, PLE 0.09; AME-AME 0.05, AME-ALE 0.01, PME-PME 0.05, PME-PLE 0.05, AME-PME 0.10, ALE-PLE 0.05. Palp (Figs. 131–132): EMB tip bifid, winged prolateral embolar process, bifid retrolateral embolar process. Leg spination: Fe IV r0-0-1, p0-0-1; Ti IV r2-1-1.

Female: Total length 6.67. Carapace 2.58 long, 2.00 wide. Femur II length 1.67. Eye sizes and interdistances:

AME 0.10, ALE 0.10, PME 0.11, PLE 0.10; AME-AME 0.05, AME-ALE 0.01, PME-PME 0.05, PME-PLE 0.05, AME-PME 0.10, ALE-PLE 0.05. Epigynum (Figs. 133–134): MED narrow, surrounded by darkened areas, LED long, PEM indistinct centrally. Leg spination: Fe IV r0-0-1, p0-0-1; Ti IV r2-1-1.

Other material examined: MALAWI: Chintheche: 17 March–2 May 1978, R. Jocqué, 8ở 2♀, MRAC 153.764; 20 March–4 April 1978, 1♂, MRAC 153.703; 3–17 April 1978, 1♀, MRAC 153.612; 1♂, MRAC 153.638; 19 April 1978, 1♂, MRAC 152.359; 2–20 May 1978, 8♂ 1♀, MRAC 153.748; 5 June 1978, 2♂, MRAC 153.001; Nkwazi Forest, Nkhata Bay: 6 June 1978, R. Jocqué, 3♂, MRAC 153.044; 17 April–4 May 1978, 4♂, MRAC 153.767.

Distribution: Forest areas of eastern Zimbabwe and Malawi (Map 11).

Zelotes mkomazi sp. n. (Figs. 135–136, Map 11)

Type: Female holotype from Mkomazi Game Reserve, E of Junction 29, Tanzania, 27 November 1994 (A. Russell-Smith), deposited in MRAC.

Etymology: The specific name is a noun in apposition taken from the type locality.

Diagnosis: Zelotes mkomazi is closest to Z. bastardi but females can be distinguished by the posteriorly pointing posterior epigynal margin and twisted median



Figs. 131–134: Zelotes haroni sp. n. 131 Palp, ventral view; 132 Palp, retrolateral view; 133 Epigynum, ventral view; 134 Epigynum, dorsal view. Scale line=0.2 mm.



Figs. 135–136: Zelotes mkomazi sp. n. **135** Epigynum, ventral view; **136** Epigynum, dorsal view. Scale line=0.2 mm.

ducts (Figs. 135–136 cf. Figs. 129–130). Colour: carapace and legs light brown, abdomen grey.

Female: Total length 9.17. Carapace 4.17 long, 2.92 wide. Femur II length 2.50. Eye sizes and interdistances: AME 0.10, ALE 0.15, PME 0.10, PLE 0.10; AME-AME 0.07, AME-ALE 0.01, PME-PME 0.10, PME-PLE 0.07, AME-PME 0.12, ALE-PLE 0.05. Epigynum (Figs. 135–136): MED twisted, PEM pointing posteriorly, LED expanded into large bulbs. Leg spination: Fe IV p0-0-1; Pa IV r0-1-0; Ti II v1-2-0, III r1-1-1; Mt II v2-1-0.

Male: Unknown.

Material examined: Only the holotype.

Distribution: Known only from the type locality (Map 11).

The *ibayensis* group

Diagnosis: Males of the *ibayensis* group can be identified by the rounded terminal apophysis, and broad embolar base visible behind the terminal apophysis retrolaterally. The embolar base has a dorsally curved retrolateral extension and a distally situated enlarged embolus. The median apophysis process is blade-like. Females have rounded margins of the epigynal plate and a large central plate. Median ducts are short, connected medially and sclerotised posteriorly.

Zelotes ibayensis sp. n. (Figs. 137-140, Map 11)

Types: Male holotype from Ibaya Hill, Mkomazi Game Reserve, Tanzania, 26 November 1994 (A. Russell-Smith), deposited in NMBZ (A14586). Paratypes: Ibaya Hill, 26 November 1994, 13 29, A. Russell-Smith, NMBZ A14733; Ibaya Hill, 15 April 1995, 13, A. Russell-Smith, AMNH.

Etymology: The specific name refers to the type locality.

Diagnosis: Zelotes ibayensis is closest to *Z. murphyorum* but can be distinguished by the broad embolus of the male (Figs. 137–138 cf. Figs. 141–142) and the centrally indistinct posterior margin of the epigynal plate of the female (Fig. 139 cf. Fig. 143). Colour: dark brown throughout.

Male: Total length 6.25. Carapace 2.71 long, 2.04 wide. Femur II length 1.75. Eye sizes and interdistances:

AME 0.10, ALE 0.10, PME 0.12, PLE 0.10; AME-AME 0.04, AME-ALE 0.01, PME-PME 0.05, PME-PLE 0.04, AME-PME 0.10, ALE-PLE 0.04. Palp (Figs. 137–138): EMB broad. Leg spination: typical for genus.

Female: Total length 6.79. Carapace 2.92 long, 2.13 wide. Femur II length 1.88. Eye sizes and interdistances: AME 0.10, ALE 0.12, PME 0.12, PLE 0.12; AME-AME 0.07, AME-ALE 0.01, PME-PME 0.05, PME-PLE 0.03, AME-PME 0.12, ALE-PLE 0.05. Epigynum (Figs. 139–140): PEM indistinct centrally. Leg spination: typical for genus.

Material examined: Only the types.

Distribution: Known only from the type locality (Map 11).

Natural history: Collected from dry mopane forest.

Zelotes murphyorum sp. n. (Figs. 141–144, Map 11)

Types: Female holotype from Watamu, Kenya, September 1984 (John and Frances Murphy), deposited in MRAC (ex JM 12396). Paratypes: 13 19 from Gedi, Kenya, 10 September 1980 (J. & F. Murphy), MRAC (ex JM 9271 3, JM 9270 9).

Etymology: The specific name is a patronym in honour of the collectors of the types.



Figs. 137–140: Zelotes ibayensis sp. n. 137 Palp, ventral view; 138 Palp, retrolateral view; 139 Epigynum, ventral view; 140 Epigynum, dorsal view. Scale line=0.2 mm.


Figs. 141–144: Zelotes murphyorum sp. n. 141 Palp, ventral view; 142 Palp, retrolateral view; 143 Epigynum, ventral view; 144 Epigynum, dorsal view. Scale line=0.2 mm.

Diagnosis: Zelotes murphyorum is closest to *Z. ibayensis* but can be distinguished by the raised sheet-like embolus of the male palp (Figs. 141–142 cf. Figs. 137–138) and the darkened areas around the median and lateral epigynal ducts and complete posterior epigynal margin (Figs. 143–144 cf. Figs. 139–140). Colour: carapace and legs light brown, abdomen grey.

Male: Total length 5.92. Carapace 2.79 long, 2.13 wide. Femur II length 1.87. Eye sizes and interdistances: AME 0.10, ALE 0.10, PME 0.12, PLE 0.10; AME-AME 0.05, AME-ALE 0.01, PME-PME 0.05, PME-PLE 0.02, AME-PME 0.08, ALE-PLE 0.03. Palp (Figs. 141–142): EMB raised and sheet-like. Leg spination: Ti II v1-1-0.

Female: Total length 6.66. Carapace 2.50 long, 1.83 wide. Femur II length 1.25. Eye sizes and interdistances: AME 0.08, ALE 0.09, PME 0.09, PLE 0.08; AME-AME 0.05, AME-ALE 0.01, PME-PME 0.04, PME-PLE 0.03, AME-PME 0.06, ALE-PLE 0.03. Epigynum (Figs. 143–144): PEM complete, MED and LED surrounded by darkened areas. Leg spination: Fe IV r0-0-1, p0-0-1; Ti III r1-1-1.

Other material examined: KENYA: Kilifi, September 1977, J. & F. Murphy, 13, JM 6183; 19 September 1977, 12, JM 6407; 20 September 1977, 13, JM 6494; 11–16 August 1980, 13, JM 8975; 24–31 August 1980, 13, JM 9061; August–September 1980; 13, JM 9198; 29 August 1980, 13, JM 8964.

Distribution: Known only from coastal Kenya (Map 11).

Natural history: Collected from beach litter.

The broomi group

Diagnosis: Males of the *broomi* group can be identified by the rounded and broad terminal apophysis, medially situated median apophysis and extremely long embolus with basal enlargement. In females the epigynal plate has extremely long rounded lateral margins which in most species displace the short posterior margin anteriorly, and the anterior margins are very wide. The median ducts are very long, narrow and coiled.

Zelotes albanicus (Hewitt, 1915) (Figs. 145–146, Map 12)

Melanophora albanicus Hewitt, 1915: 100, fig. 8b (D?). Zelotes albanicus: Tucker, 1923: 378–379; Giltay, 1935: 16; Roewer, 1955: 462; Bonnet, 1959: 4911; Platnick, 2005.

Diagnosis: Zelotes albanicus can be distinguished by the large rounded lateral epigynal margin, straight posterior epigynal margin and structure of the epigynal ducts (Figs. 145–146). Colour: black throughout.

Female: Total length 6.97. Carapace 3.00 long, 2.17 wide. Femur II length 1.73. Eye sizes and interdistances: AME 0.07, ALE 0.10, PME 0.10, PLE 0.10; AME-AME 0.03, AME-ALE 0.01, PME-PME 0.05, PME-PLE 0.03, AME-PME 0.10, ALE-PLE 0.05. Epigynum (Figs. 145–146): LEM long and widely spaced, PEM straight. Leg spination: Ti III p2-1-1.

Male: Unknown.

Material examined: SOUTH AFRICA: Alicedale, May 1915, F. Cruden, 1¢ (misidentified as *Z. invidus* by Tucker, 1923), NMSA; Caledon, July 1910, W. F. Purcell, 10¢, SAMC 150072; 22 mi W of Cofimvaba, 14 April 1958, Ross & Lead, 1¢, CASC; Florisbad: June 1985, museum staff, 1¢, ex BMSA 863; 30 March–26 April 1988, 1¢, ex BMSA 4314; 10–24 May 1988, 1¢, BMSA 4394; Golden Gate, May 1985, museum staff, 2¢, BMSA 873; Grahamstown, July 1901, C. Sole, 1¢ (holotype), NMSA 14618; 2 mi SW of Ladismith, 24 April 1958, Ross & Lead, 2¢, CASC; Middelburg: 8 May 1991, M. de Jager, 1¢, PPRI 91/1057; 3¢, PPRI 91/1076; 21 August 1991, 1¢, ex PPRI 91/1432; Signal Hill, 3 May 1976, F. Wanless, 1¢, ex PPRI 88/221.

Distribution: Known only from South Africa (Map 12).

Natural history: Has been collected in areas infested with termites and in association with *Z. fuligineus*.



Figs. 145–146: Zelotes albanicus (Hewitt, 1915). 145 Epigynum, ventral view; 146 Epigynum, dorsal view. Scale line=0.2 mm.

Zelotes broomi (Purcell, 1907) (Figs. 147–150, Map 12)

Melanophora broomi Purcell, 1907: 329-340, pl. 15, fig. 52 (D^Q).

Zelotes broomi: Tucker, 1923: 355; Giltay, 1935: 16; Roewer, 1955: 463; Bonnet, 1959: 4915; Platnick, 2005.

Diagnosis: The embolus of males of *Zelotes broomi* is very long and has a basal enlargement (Figs. 147–148). Females of *Zelotes broomi* are closest to those of *Z. lightfooti* but can be distinguished by the posterior epigynal margin being close to the spermathecae and the epigynal ducts being coiled twice (Figs. 149–150 cf. Figs. 153–154) Colour: all specimens are faded.

Male: Total length 4.58. Carapace 2.08 long, 1.50 wide. Femur II length 1.08. Eye sizes and interdistances: eye area damaged. Palp (Figs. 147–148): MA central, embolus with bulbous extension and hook-like process at base. Leg spination: Fe IV r0-0-1, p0-0-1; Ti III r1-1-1, IV r2-1-1; Mt II v2-2-0.

Female: Total length 5.9. Carapace 2.27 long, 1.75 wide. Femur II length 1.38. Eye sizes and interdistances: AME 0.07, ALE 0.07, PME 0.06, PLE 0.06; AME-AME 0.01, AME-ALE 0.01, PME-PME 0.06, PME-PLE 0.03, AME-PME 0.06, ALE-PLE 0.04. Epigynum (Figs. 149–150): PEM pointed and posteriorly positioned, MED coiled twice. Leg spination: Mt II v2-2-0.

Material examined: SOUTH AFRICA: Bergvliet, October 1896, W. F. Purcell, 1º, SAMC 3496; Portville Rd, September 1898, R. M. Lightfoot, 2º, SAMC 4159; Steenberg Cove, St Helena Bay, May 1902, J. E. C. Goold, 1º, SAMC 13879; Stellenbosch, September 1904,



Figs. 147–150: Zelotes broomi (Purcell, 1907). **147** Palp, ventral view; **148** Palp, retrolateral view; **149** Epigynum, ventral view; **150** Epigynum, dorsal view. Scale line=0.2 mm.



Map 12: Distribution of Zelotes albanicus \blacktriangle , Z. broomi \bigcirc , Z. invidus \blacklozenge , Z. lightfooti \triangle and Z. siyabonga \Box in southern Africa.

R. Broom, 1[°] (holotype), SAMC 13877; Stompneus, St Helena Bay, July 1903, J. E. C. Goold, 1[°], SAMC 13878; 1[°], SAMC 13263; Tulbagh Rd, August 1903, W. F. Purcell, 1[°], SAMC 13311.

Distribution: Only known from Cape Province, South Africa (Map 12).

Zelotes invidus (Purcell, 1907) (Figs. 151–152, Map 12)

Melanophora invida Purcell, 1907: 328, pl. 15, fig. 47 (DQ).

Zelotes invida: Tucker, 1923: 362 (D^Q).

Melanophora aculeata Purcell, 1908: 237, pl. 11, fig. 20 (Dδ 9; 9 only (δ misidentified Z. fuligineus)); Lawrence, 1965: 11. Syn. n.

Zelotes aculeata: Tucker, 1923: 353–354; Lawrence, 1965: 12; Griffin & Dippenaar-Schoeman, 1991: 166.

- Zelotes aculeatus: Giltay, 1935: 14; Roewer, 1955: 462; Bonnet, 1959: 4911; Platnick, 2005.
- Zelotes invidus: Giltay, 1935: 17; Roewer, 1955: 464; Bonnet, 1959: 4928; Platnick, 2005.

Remarks: Platnick (2005) incorrectly states that the original description of Z. *invidus* is of a juvenile, as this description (Purcell, 1907) was based on 9 \Re specimens from various localities around the Cape Peninsula. Zelotes invidus and Z. aculeatus are clearly the same species (types examined), thus Z. aculeatus is considered a junior synonym of Z. invidus. The syntype male of Z. aculeatus described by Purcell (1908) is a male of Z. fuligineus and as yet no males are known for Z. invidus.

Diagnosis: Zelotes invidus can be distinguished from other members of the group by the structure of the median epigynal ducts which are long and curved, and by the presence of lateral epigynal ducts (Figs. 151–152). Colour: dark brown.

Female: Total length 6.08. Carapace 2.75 long, 1.92 wide. Femur II length 1.25. Eye sizes and interdistances: AME 0.09, ALE 0.10, PME 0.10, PLE 0.10; AME-AME 0.04, AME-ALE 0.01, PME-PME 0.06, PME-PLE 0.05, AME-PME 0.12, ALE-PLE 0.07. Epigynum (Figs. 151–152): LEM long and relatively close together, AEM wide, LED coiled. Leg spination: Mt II v2-2-0.

Male: Unknown.



Figs. 151–154: 151–152 Zelotes invidus (Purcell, 1907). 151 Epigynum, ventral view; 152 Epigynum, dorsal view. 153–154 Zelotes lightfooti (Purcell, 1907). 153 Epigynum, ventral view; 154 Epigynum, dorsal view. Scale line=0.2 mm.

Material examined: NAMIBIA: Penguin Island, 2 December 1985, M. Griffin, 1º, SMWN 43303; Possession Island: May 1903, L. Schultze, 29 (syntypes of aculeatus; 18 syntype misidentified= fuligineus), SAMC 150601; 29, ZMHB 28644; 4 December 1985, M. Griffin, 19, SMWN 43316. SOUTH AFRICA: Bergvliet: October 1896, W. F. Purcell, 1º (holotype of invidus), SAMC 3497; December 1899, W. F. Purcell, 19, SAMC 6234; nr Bethlehem, 1901, 19, SAMC 9414; Caledon: July 1910, W. F. Purcell, 89, SAMC 150071; 1914, 19, SAMC B378; 19, SAMC B379; Camps Bay, October 1898, F. Treleaven, 29, SAMC 4484; Cape Peninsula, 1904, W. F. Purcell, 19, SAMC 13871; Cape Town: October-December 1899, J. Faure, 19, SAMC 5924; September 1899, Mrs Purcell, 19, SAMC 6086; Cederberg: July 1962, N. Leleup, 49, MRAC 131.981; July 1958, J. Smith, 19, MRAC 121.936; July 1962, N. Leleup, 19, MRAC 131.999; Ceres, October 1897, W. F. Purcell, 19, SAMC 3250; Dassen Island, April 1897, R. Lightfoot, 19, SAMC B383; Hawequas Mts., 4 December 1978, Endrödy-Younga, 19, TMSA 15413; Hout Bay, November 1901, W. F. Purcell, 19, SAMC 12217; Kalk Bay Mts., March 1902, W. F. Purcell, 19, SAMC 12303; Karoo National Park, December 1986-March 1987, museum staff, 19, BMSA 2046; Matjiesfontein, August 1906, W. F. Purcell, 19, SAMC 150466; Montagu, November 1919, R. W. Tucker, 19, SAMC B4740; Mt. Zebra National Park, July-October 1985, L. Lotz, 39, ex BMSA 1221; Paternoster, 19 November 1949, B. Malkin, 19, CASC; Platteklip Gorge, 17 December 1914, R. Tucker, 1º, SAMC B799; Plettenberg Bay, 18-25 December 1981, S. & J. Peck, 19, CASC 172; 30 km E of Port Elizabeth, 17 January 1989, R. Jocqué, 19, MRAC 169.810; Rabiesberg, November 1897, W. F. Purcell, 29, SAMC 3339; Stellenbosch, October 1904, R. Broom, 19, SAMC 14326; Stompneus, January 1902, J. E. C. Goold, 19, SAMC B3412; Table Mt., west slope, 21 November 1949, B. Malkin, 39, CASC; Touws River, September 1896, W. F. Purcell, 19, SAMC 3969; Uitzicht Annex, Knysna, 19 October-28 December 1988, L. Lotz, 29, BMSA 3124.

Distribution: Known only from the western Cape, South Africa and Namibia (Map 12).

Natural history: This species has been collected with *Zelotes fuligineus*.

Zelotes lightfooti (Purcell, 1907) (Figs. 153–154, Map 12)

Melanophora lightfooti Purcell, 1907: 329, pl. 15, fig. 48 (D^Q).

Zelotes lightfooti: Tucker, 1923: 363–364; Giltay, 1935: 17; Roewer, 1955: 464; Bonnet, 1959: 4931; Platnick, 2005.

Zelotes ornatus Tucker, 1923: 368, pl. 11, fig. 73 (D?); Giltay, 1935: 17; Roewer, 1955: 465; Bonnet, 1959: 4938; Platnick, 2005. Syn. n.

Remarks: I have examined the types of both Z. *lightfooti* and Z. *ornatus* and have found them to be identical, thus Z. *ornatus* is considered a junior synonym of Z. *lightfooti*.

Diagnosis: Zelotes lightfooti is closest to Z. broomi and Z. albanicus but can be distinguished by the large rounded lateral epigynal margin and structure of the epigynal ducts (Figs. 153–154 cf. Figs. 149–150 and 145–146). Colour: all specimens are faded.

Female: Total length 7.3. Carapace 3.00 long, 2.25 wide. Femur II length 1.67. Eye sizes and interdistances: AME 0.07, ALE 0.10, PME 0.10, PLE 0.10; AME-AME 0.06, AME-ALE 0.01, PME-PME 0.07, PME-PLE 0.05, AME-PME 0.11, ALE-PLE 0.05. Epigynum (Figs. 153–154): LEM long and widely spaced, MED coiled once. Leg spination: Fe IV r0-0-1, p0-0-1.

Male: Unknown.

Material examined: SOUTH AFRICA: Ceres, October 1897, R. M. Lightfoot, 29 (syntypes of *lightfooti*), SAMC 3251; Gt Winterhoek Mts., 20 November 1916, R. W. Tucker, 19 (holotype of *ornatus*), SAMC B2859; 4–14 April 1916, R. W. Tucker, 19, SAMC B2545.

Distribution: Known only from Cape Province, South Africa (Map 12).

Zelotes siyabonga sp. n. (Figs. 155-156, Map 12)

Type: Female holotype from Riverside Ranch Camp, Zambezi Valley, Zimbabwe, 9–13 December 2000 (F. Nyathi), deposited in NMBZ (A14203).

Etymology: The specific name is a noun in apposition taken from the Ndebele for thank you, thank you for all that is.

Diagnosis: Zelotes siyabonga can be distinguished from the other species in this group by the shorter lateral epigynal margins and enlarged ends of the median ducts (Figs. 155–156). Colour: dark brown throughout.

Female: Total length 10.00. Carapace 4.17 long, 2.75 wide. Femur II length 2.08. Eye sizes and interdistances: AME 0.12, ALE 0.12, PME 0.15, PLE 0.12; AME-AME 0.04, AME-ALE 0.01, PME-PME 0.05, PME-PLE 0.05, AME-PME 0.18, ALE-PLE 0.08. Epigynum (Figs. 155–156): MED enlarged at anterior end, LEM short. Leg spination: Fe IV r0-0-1, p0-0-1; Ti III p2-1-1, IV p2-1-1. *Male*: Unknown.

Material examined: Only the holotype.



Figs. 155–156: Zelotes siyabonga sp. n. **155** Epigynum, ventral view; **156** Epigynum, dorsal view. Scale line=0.2 mm.

Distribution: Known only from the type locality (Map 12).

The capensis group

Diagnosis: The male embolus of species of the *capensis* group is long, thick, and originates retrolaterally. The terminal apophysis is short, and the long embolar base is visible behind the terminal apophysis. The female epigynal plate has long rounded lateral margins which displace the straight posterior margin anteriorly.

Zelotes capensis sp. n. (Figs. 157-160, Map 13)

Types: Male holotype and female paratype from Burgersdorp, Cape Province, South Africa, 1970 (P. L. G. Benoit), deposited in MRAC (137.478).

Etymology: The specific name refers to the type locality.

Diagnosis: Zelotes capensis can be distinguished from other members of the group by the thin finger-like prolateral extension and the short retrolateral prong on the embolar base of the male palp (Figs. 157–158). The female can be easily identified by the distinctive epigynal plate and ducts (Figs. 159–160). Colour: carapace and legs brown, abdomen grey.



Figs. 157–160: Zelotes capensis sp. n. 157 Palp, ventral view; 158 Palp, retrolateral view; 159 Epigynum, ventral view; 160 Epigynum, dorsal view. Scale line=0.2 mm.



Map 13: Distribution of Zelotes capensis ⊿, Z. lotzi ■ and Z. tendererus ● in southern Africa.

Male: Total length 5.58. Carapace 2.67 long, 1.92 wide. Femur II length 1.50. Eye sizes and interdistances: AME 0.09, ALE 0.10, PME 0.09, PLE 0.09; AME-AME 0.06, AME-ALE 0.01, PME-PME 0.06, PME-PLE 0.05, AME-PME 0.10, ALE-PLE 0.05. Palp (Figs. 157–158): EB with thin finger-like prolateral embolar process. Leg spination: Fe IV r0-0-1, p0-0-1; Pa III p0-1-0, IV r0-1-0; Ti III r1-1-1, IV r1-1-2; Mt I & II v2-2-0.

Female: Total length 6.92. Carapace 2.50 long, 1.92 wide. Femur II length 1.50. Eye sizes and interdistances: AME 0.09, ALE 0.11, PME 0.10, PLE 0.10; AME-AME 0.04, AME-ALE 0.01, PME-PME 0.05, PME-PLE 0.05, AME-PME 0.10, ALE-PLE 0.06. Epigynum (Figs. 159–160): MED short, with one coil, PEM short. Leg spination: Fe IV r0-0-1, p0-0-1; Pa III p0-1-0, IV r0-1-0; Ti III r1-1-1, IV r1-1-2; Mt I & II v2-2-0.

Material examined: Only the types.

Distribution: Known only from the type locality (Map 13).

Zelotes lotzi sp. n. (Figs. 161–164, Map 13)

Types: Female holotype and 19 paratype from Boshof Table Farm, South Africa, September–December 1983 (museum staff), deposited in BMSA (148). Male paratype from Dendron, South Africa, 1 September 1970 (J. Viljoen), PPRI 89/1027.

Etymology: The specific name is a patronym in honour of Leon Lotz, curator of arachnids at Bloemfontein Museum.



Figs. 161–164: Zelotes lotzi sp. n. 161 Palp, ventral view; 162 Palp, retrolateral view; 163 Epigynum, ventral view; 164 Epigynum, dorsal view. Scale line=0.2 mm.

Diagnosis: The retrolateral extension of the embolar base of the male *Zelotes lotzi* is thick and the embolus is very broad proximally (Figs. 161–162). The median ducts of the females of *Z. lotzi* are simpler than those of the other species in this group and are therefore distinctive (Fig. 164). Colour: brown throughout.

Male: Total length 6.58. Carapace 2.83 long, 2.08 wide. Femur II length 1.67. Eye sizes and interdistances: AME 0.10, ALE 0.10, PME 0.13, PLE 0.10; AME-AME 0.04, AME-ALE 0.005, PME-PME 0.02, PME-PLE 0.04, AME-PME 0.10, ALE-PLE 0.05. Palp (Figs. 161–162): Embolus very broad proximally, embolar base with thick prong-like extension, tibial apophysis hollowed. Leg spination: Ti III r1-1-1, IV r2-2-2; Mt I v2-2-0, III r1-2-2.

Female: Total length 7.92. Carapace 3.33 long, 2.08 wide. Femur II length 1.67. Eye sizes and interdistances: AME 0.10, ALE 0.10, PME 0.12, PLE 0.10; AME-AME 0.06, AME-ALE 0.01, PME-PME 0.05, PME-PLE 0.04, AME-PME 0.11, ALE-PLE 0.06. Epigynum (Figs. 163–164): MED simple, LED very short. Leg spination: Fe IV r0-0-1, p0-0-1; Ti III r1-1-1; Mt II v2-2-0, III r1-2-2.

Other material examined: SOUTH AFRICA: Dendron: 6 November 1969, J. Viljoen, 2º, PPRI 89/1100; December 1969, 1º, PPRI 84/538; Loskop Dam, 3 August 1993, M. Filmer, 2º, TMSA 18519.

Distribution: Known only from South Africa (Map 13).

Zelotes tendererus sp. n. (Figs. 165-168, Map 13)

Types: Female holotype from Siakaunda Mt., Zambia, 4 August 1994 (F. Nyathi), deposited in NMBZ (A11328). Paratypes: 7ð from Wildlives Game Farm, 4–8 August 1994 (F. Nyathi), NMBZ (A11250).

Etymology: The specific name is an adjective taken from the Shona for coiled, referring to the female ducts.



Figs. 165–168: Zelotes tendererus sp. n. 165 Palp, ventral view; 166 Palp, retrolateral view; 167 Epigynum, ventral view; 168 Epigynum, dorsal view. Scale line=0.2 mm.

Diagnosis: *Zelotes tendererus* is easily distinguished by the bifid retrolateral process on the embolar base of the male palp (Figs. 165–166), and the coiled and anteriorly enlarged median ducts of the female epigynum (Fig. 168). Colour: dark brown throughout.

Male: Total length 5.25. Carapace 2.50 long, 1.83 wide. Femur II length 1.25. Eye sizes and interdistances: AME 0.10, ALE 0.10, PME 0.10, PLE 0.10; AME-AME 0.04, AME-ALE 0.01, PME-PME 0.04, PME-PLE 0.03, AME-PME 0.06, ALE-PLE 0.02. Palp (Figs. 165–166): EB with bifid retrolateral embolar process, EMB longer than in *Z. lotzi*. Leg spination: Fe IV p0-0-1; Ti III r1-1.

Female: Total length 6.50. Carapace 2.75 long, 2.00 wide. Femur II length 1.67. Eye sizes and interdistances: AME 0.10, ALE 0.11, PME 0.10, PLE 0.10; AME-AME 0.03, AME-ALE 0.01, PME-PME 0.04, PME-PLE 0.04, AME-PME 0.08, ALE-PLE 0.05. Epigynum (Figs. 167–168): MED long, coiled, anteriorly enlarged. Leg spination: Ti III r1-1-1.

Other material examined: MALAWI: Chintheche, Chisarira forest: 15 September–1 October 1977, R. Jocqué, 1º, MRAC 153.239; 27 August–12 September 1977, 2ð, MRAC 153.284; 28 October 1977, 1º, MRAC 153.345; 28 October–18 November 1977, 1º, MRAC 153.404. ZIMBABWE: Mavuradohna Wilderness Area, 8 September 1989, J. Minshull, 1º, NMBZ A7874.

Distribution: Malawi, Zambia and Zimbabwe (Map 13).

The mediocris group

Diagnosis: Males of the *mediocris* group vary in the shape of the terminal apophysis and embolar base, and the only shared character is the long retrolaterally originating embolus. The females, however, are very similar in the shape of the epigynal plates and ducts. The lateral margins are hood-like and the posterior margins

are very long and extend greatly to the posterior edge of the plate. The median ducts have sinuous anterior enlargements, and the paramedian ducts are long.

Zelotes chinguli sp. n. (Figs. 169–172, Map 14)

Type: Male holotype from Chinguli Crossing, Gonarezhou, Zimbabwe, 12 June 1983 (C. Sharp), deposited in NMBZ (A1895).

Etymology: The specific name is a noun in apposition taken from the type locality.

Diagnosis: Males of *Zelotes chinguli* are easily distinguished from all other species of *Zelotes* by the twisted embolar base that is visible distal to the terminal apophysis (Figs. 169–170). Females differ from the other species in this group by a posterior enlargement of the extension of the posterior margin of the epigynal plate and the longer, thinner median ducts (Figs. 171–172). Colour: carapace dark brown, legs light brown, abdomen grey with brown scutum.

Male: Total length 5.83. Carapace 2.50 long, 1.92 wide. Femur II length 1.67. Eye sizes and interdistances: AME 0.10, ALE 0.10, PME 0.10, PLE 0.10; AME-AME 0.05, AME-ALE 0.01, PME-PME 0.05, PME-PLE 0.03, AME-PME 0.07, ALE-PLE 0.04. Palp (Figs. 169–170): EMB long, EB broad and twisted. Leg spination: Ti III r1-1-1, IV r2-1-1, p2-1-1.

Female: Total length 7.83. Carapace 3.25 long, 2.42 wide. Femur II length 1.83. Eye sizes and interdistances: AME 0.12, ALE 0.13, PME 0.12, PLE 0.12; AME-AME 0.06, AME-ALE 0.01, PME-PME 0.05, PME-PLE 0.05, AME-PME 0.10, ALE-PLE 0.05. Epigynum (Figs. 171–172): MED longer and thinner than in other species in this group, PEM with posterior enlargement. Leg spination: Fe IV r0-0-1, p0-0-1; Ti III r1-1-1, IV r2-1-1, p2-1-1.



Figs. 169–172: Zelotes chinguli sp. n. 169 Palp, ventral view; 170 Palp, retrolateral view; 171 Epigynum, ventral view; 172 Epigynum, dorsal view. Scale line=0.2 mm.



Figs. 173–174: Zelotes mediocris (Kulczyński, 1901). **173** Epigynum, ventral view; **174** Epigynum, dorsal view. Scale line=0.2 mm.

Other material examined: BOTSWANA: Maxwee: 26 May 1976, A. Russell-Smith, 13 19, AMNH; 28 August 1975, 19, AMNH. ZIMBA-BWE: Doddieburn Ranch, 17 April 1986, F. Nyathi, 13 19, NMBZ A14276; Esigodini, 1 June 1963, 19, NMBZ A586; Katombora Campsite, 27 August 1986, Falcon College & museum staff, 19, NMBZ A4821; Kazuma Forest Camp, 17 April 1988, Falcon College & museum staff, 19, NMBZ A7421.

Distribution: Known only from Zimbabwe and Botswana (Map 14).

Zelotes mediocris (Kulczyński, 1901) (Figs. 173–174, Map 14)

Prosthesima mediocris Kulczyński, 1901: 9-11, pl. 1, fig. 6 (DQ).

Zavattarica bimamillata Caporiacco, 1941: 98, fig. 36; Roewer, 1955: 473. Syn. n.

Zelotes mediocris: Roewer, 1955: 464; Bonnet, 1959: 4935; Platnick, 2005.

Zelotes bimamillatus: Platnick, 1992: 178-79, figs. 1-2.

Zelotes bimammillatus: Platnick, 1998: 788; 2005.

Remarks: Although the type of *Zelotes mediocris* cannot be traced, the illustration by Kulczyński (1901: fig. 6) of the female epigynal plate is most certainly the same as that of *Z. bimamillatus*; I am synonymising the two species as they are from the same area in Ethiopia.

Diagnosis: Zelotes mediocris is closest to Z. tuckeri, but can be distinguished by the short median epigynal ducts (Fig. 174 cf. Fig. 178). Colour: brown throughout.

Female: Total length 6.25. Carapace 2.92 long, 2.08 wide. Femur II length 1.75. Eye sizes and interdistances: AME 0.10, ALE 0.11, PME 0.10, PLE 0.10; AME-AME 0.04, AME-ALE 0.01, PME-PME 0.04, PME-PLE 0.04, AME-PME 0.10, ALE-PLE 0.05. Epigynum (Figs. 173–174): MED short. Leg spination: Ti III r1-1-1, IV r2-1-1, p2-1-1; Mt I v2-1-0.

Male: Unknown.

Material examined: ETHIOPIA: Sagan River, 19 June 1939, Prof. E. Zavattari, 19 (holotype of *bimamillatus*), HNHM.

Distribution: Known only from Ethiopia (Map 14).

Zelotes tuckeri Roewer, 1951 (Figs. 175–178, Map 14)

Zelotes rufipes Tucker, 1923: 372–373, fig. 76 (D♂♀); Giltay, 1935: 18; Bonnet, 1959: 4947; Eagle, 1985: 136; name preoccupied.

Zelotes tuckeri Roewer, 1951: 444(replacement name); 1955: 466; Van den Berg & Dippenaar-Schoeman, 1991: 248; Platnick, 2005.

Diagnosis: The male palp of *Zelotes tuckeri* can be distinguished by the flat embolar base, visible behind the sinuous distal end of the terminal apophysis (Fig. 175), and by the median ducts of the female epigynum which

are longer than in *Z. mediocris* and thicker in diameter than in *Z. chinguli* (Fig. 178 cf. Figs. 174 and 172). Colour: carapace and legs brown, abdomen grey, with brown scutum in male.

Male: Total length 6.03. Carapace 2.83 long, 2.19 wide. Femur II length 1.72. Eye sizes and interdistances: AME 0.06, ALE 0.10, PME 0.08, PLE 0.08; AME-AME 0.03, AME-ALE 0.01, PME-PME 0.05, PME-PLE 0.05, AME-PME 0.08, ALE-PLE 0.05. Palp (Figs. 175–176): EB flat, TA sinuous distally. Leg spination: Ti III r1-1-1; Mt I & II v2-2-0.

Female: Total length 6.72. Carapace 2.78 long, 2.08 wide. Femur II length 1.67. Eye sizes and interdistances: AME 0.08, ALE 0.10, PME 0.10, PLE 0.10; AME-AME 0.03, AME-ALE 0.01, PME-PME 0.03, PME-PLE 0.05, AME-PME 0.07, ALE-PLE 0.04. Epigynum (Figs. 177–178): MED longer than in *Z. mediocris* and thicker in diameter than in *Z. chinguli*. Leg spination: Mt II v2-2-0.

Material examined: ETHIOPIA: 52km N of Yabello, Sidamo, 30 September 1982, A. Russell-Smith, 1Å, AMNH. KENYA: Cherangani, 10 August 1974, J. Murphy, 1¢, JM; Chyulu Hills, 29 July– 4 August 1986, D. Sellen, 1Å, NMKE; Lake Harrington, 2 August 1974, J. Murphy, 1Å 2¢, JM; Mtembur, 30 August–4 September 1984, J. Murphy, 1¢, JM 12168; Nairobi: 17–18 July 1972, J. Murphy, 1¢, JM 1268; July 1974, 1Å 1¢, JM 3509; 14 May 1988, A. Russell-Smith, 1Å, NMBZ A13575; Ruiru, 17 August 1984, J. Murphy, 1¢, JM 11883; Sebit, 21 August 1984, J. & F. Murphy, 1¢, JM 12055. NAMIBIA: Buffalo Base, 3–10 April 1990, 1Å 1¢, SMWN 41772. SOUTH AFRICA: Acornhoek, November 1918, R. Tucker, 1¢, SAMC B4376; Adinvale Farm, 8 February 1979, D. Uys, 2¢, PPRI 2000/134; Blyde



Figs. 175–178: Zelotes tuckeri Roewer, 1951. 175 Palp, ventral view; 176 Palp, retrolateral view; 177 Epigynum, ventral view; 178 Epigynum, dorsal view. Scale line=0.2 mm.



Map 14: Distribution of *Zelotes chinguli* \blacktriangle , *Z. mediocris* \blacksquare and *Z. tuckeri* \bullet in Africa.

River Canyon Botanical Reserve: 8 April 2001, R. Jocqué, 28, MRAC 210.178; 1ð, MRAC 210.147; Bokmakierie Game Reserve: 8 April 2001, R. Jocqué, 1d 29, MRAC 210.087; 19, MRAC 210.130; 11 April 2001, 19, MRAC 210.098; Cookhouse, 5 October 1905, W. F. Purcell, 19, SAMC B2390; Durban, September 1905, W. F. Purcell, 19, SAMC 150 621; Florisbad, 30 March-26 April 1988, L. Lotz, 13, BMSA 4306; Lajuma Farm: 8 August 1997, R. Jocqué, 19, MRAC 206.378, 9 August 1997, 1º, MRAC 206.334; Makalali, February-December 1999, C. Whitmore, 1d, DMSA 406; Mfongosi, February 1918, W. E. Jones, 63 119, SAMC B4156; Ndumo Game Reserve: 3 December 2000, C. Haddad, 13, NMBZ A14388; 5 July 2002, 39, PPRI; Nyala Game Reserve, 28 November 1981, P. Reavell, 1& 29, PPRI 92/287; 70 km NW of Nystroom, 5 April 1974, M. Filmer, 13, TMSA 18688; Pietermaritzburg: January 1945, R. Lawrence, 19, NMBZ A268; 19 April 1976, F. Wanless, 18, PPRI 88/231; Sabi Reserve, August 1927, E. C. Gill, 19, SAMC B7162; Settlers Farm Leeudoring, 24 March 1986, D. Uys, 1d, PPRI 94/40; Tshipise Hot Springs, July 1979, C. A. Car, 19, NMBZ A787; Tuinplaas: 18 July 2001, M. van Jaarsveld, 19, PPRI 2003/190; 7 November 2001, 19, PPRI 2003/28; 9 January 2002, 1º, PPRI 2003/263; 7 May 2002, 1º, PPRI 2003/322. ZIMBABWE: Baobab Spring, 13 April 1990, Falcon College & museum staff, 28, NMBZ A9846; Chishakwe Ranch Safari Camp, 6-7 December 1998, Girl's College & museum staff, 58, NMBZ A13402; 6 km E of Criterian Dam, 17 July 1992, F. Nyathi, 19, NMBZ A9616; Doddieburn Ranch, 15 April 1986, F. Nyathi, 13, NMBZ A4528; Gleneagles Estate Inyanga, 12-22 March 1970, H. D. Jackson, 19, NMBZ A9580; Harare: April 1917, R. Tucker, 35 39 (syntypes), SAMC B3255; 19 April 1970, I. R. MacKay, 13, NMBZ A1357; May 1999, M. Cumming, 178 49, NMBZ A13468; April 1999, 28 19, NMBZ A13468; Hunters Camp Sentinel Ranch, 5 April 1992, Falcon College & museum staff, 23 19, NMBZ A10034; Kemavanga Camp, 8-11 April 1991, F. Nyathi, 13 19, NMBZ A9032; Mavuradonha

Wilderness Area, 8 September 1989, J. Minshull, 19, NMBZ A7879; Phumakanye School, 24 June 1997, F. Nyathi, 13, NMBZ A13790; Rifa Conservation Camp, 4–8 December 1995, Girl's College & museum staff, 23, NMBZ A13303; 13, NMBZ A13305; Sibizini Dam: 17 April 1986, F. Nyathi, 19, NMBZ A4593; 23 29, NMBZ A4568.

Distribution: Southern and eastern Africa (Map 14). *Natural history*: Peak adult activity recorded from February–May.

The jocquei group

Diagnosis: Males of the *jocquei* group have the embolus of medium length, the embolar base just visible behind the terminal apophysis, and with a prolateral prong. The female epigynal plate has rounded lateral and posterior margins. The median ducts have bulbous enlargements anteriorly which are displaced dorsally.

Zelotes jocquei sp. n. (Figs. 179–180, Map 15)

Type: Female holotype from Kitale, Kenya, 2 December 1953 (N. Leleup), deposited in MRAC (76.637).

Etymology: The specific name is a patronym in honour of Dr R. Jocqué, arachnologist, Museé Royal de l'Afrique Central.

Diagnosis: Zelotes jocquei can be distinguished by the median ducts of the epigynum being greatly enlarged anteriorly (Fig. 180). Colour: dark brown throughout.

Female: Total length 8.75. Carapace 3.33 long, 2.50 wide. Femur II length 2.08. Eye sizes and interdistances: AME 0.10, ALE 0.11, PME 0.11, PLE 0.12; AME-AME 0.04, AME-ALE 0.01, PME-PME 0.06, PME-PLE 0.03, AME-PME 0.10, ALE-PLE 0.05. Epigynum (Figs. 179–180): MED enlarged anteriorly. Leg spination: Pa IV r0-1-0; Ti III r1-1-1, IV p2-1-1.

Male: Unknown.

Material examined: Only the holotype.

Distribution: Known only from the type locality (Map 15).



Figs. 179–180: Zelotes jocquei sp. n. **179** Epigynum, ventral view; **180** Epigynum, dorsal view. Scale line=0.2 mm.

Zelotes mosioatunya sp. n. (Figs. 181–184, Map 15)

Types: Female holotype from Victoria Falls, Zimbabwe, December 1987 (P. Smith), deposited in NMBZ (A6446). Paratypes: Rosslyn Safari Camp, Zimbabwe, 6–9 December 1994 (M. FitzPatrick), 2*ð*, NMBZ A12285; 5*ð* 19, NMBZ A12264.

Etymology: The specific name is a noun in apposition taken from the Lozi name for the type locality meaning "The smoke that thunders".

Diagnosis: Males of *Zelotes mosioatunya* can be distinguished by the short prolateral prong on the short embolar base of the palp (Fig. 181), and females by the small kidney-shaped anterior enlargement on the median ducts of the epigynum (Fig. 184). Colour: black throughout.

Male: Total length 6.25. Carapace 2.79 long, 2.08 wide. Femur II length 1.61. Eye sizes and interdistances: AME 0.10, ALE 0.10, PME 0.10, PLE 0.12; AME-AME 0.03, AME-ALE 0.01, PME-PME 0.04, PME-PLE 0.05, AME-PME 0.08, ALE-PLE 0.05. Palp (Figs. 181–182): EMB medium length, EB short with prolateral prong. Leg spination: Pa IV r0-1-0; Ti III r1-1.

Female: Total length 7.66. Carapace 3.14 long, 2.38 wide. Femur II length 1.67. Eye sizes and interdistances:



Figs. 181–184: Zelotes mosioatunya sp. n. **181** Palp, ventral view; **182** Palp, retrolateral view; **183** Epigynum, ventral view; **184** Epigynum, dorsal view. Scale line=0.2 mm.



Map 15: Distribution of *Zelotes jocquei* \triangleleft , *Z. mosioatunya* \bullet and *Z. musapi* \blacksquare in Africa.

AME 0.10, ALE 0.10, PME 0.10, PLE 0.09; AME-AME 0.04, AME-ALE 0.01, PME-PME 0.05, PME-PLE 0.03, AME-PME 0.10, ALE-PLE 0.04. Epigynum (Figs. 183–184): MED with kidney-shaped anterior enlargement. Leg spination: Ti IV r2-1-1, p2-1-1.

Other material examined: BOTSWANA: Maxwee: 28 January 1976, A. Russell-Smith, 13, AMNH; 28 November 1975, 13, AMNH. ZAMBIA: Wildlives Game Farm, 9–14 December 1994, F. Nyathi, 13, NMBZ A11819; 13, NMBZ A11902. ZIMBABWE: Nungu Farm, 8 February 2000, Girls College & museum staff, 19, NMBZ A14081.

Distribution: Northern Botswana, Zambia and Zimbabwe (Map 15).

Zelotes musapi sp. n. (Figs. 185–186, Map 15)

Type: Female holotype from Musapi Mountain, Zimbabwe, 19 April 1984 (J. Minshull), deposited in NMBZ (A2128).

Etymology: The specific name is a noun in apposition taken from the type locality.

Diagnosis: Zelotes musapi can be distinguished by the enlarged lateral epigynal ducts and irregular-shaped enlargements on the median ducts (Fig. 186). Colour: brown throughout.

Female: Total length 7.75. Carapace 3.33 long, 2.75 wide. Femur II length 2.08. Eye sizes and interdistances: AME 0.12, ALE 0.12, PME 0.12, PLE 0.10; AME-AME 0.03, AME-ALE 0.01, PME-PME 0.05, PME-PLE 0.05, AME-PME 0.10, ALE-PLE 0.05. Epigynum (Figs. 185–186): MED enlargements irregular, LED enlarged. Leg spination: Fe IV r0-0-1, p0-0-1; Mt II v2-2-0.

Male: Unknown.

Material examined: Only the holotype.



Figs. 185–186: Zelotes musapi sp. n. **185** Epigynum, ventral view; **186** Epigynum, dorsal view. Scale line=0.2 mm.

Distribution: Known only from the type locality (Map 15).

The andreinii group

Diagnosis: Males of the *andreinii* group have the embolus of medium length with either a winged flange or prong. The low embolar base has a retrolateral prong. The female epigynal plate has rounded lateral margins and a straight posterior margin. The median ducts are wider in diameter anteriorly than posteriorly.

Zelotes andreinii Reimoser, 1937 (Figs. 187–190, Map 16)

Zelotes andreinii Reimoser, 1937: 23, fig. 4 (D?); Roewer, 1955: 462; Bonnet, 1959: 4912; Platnick, 2005.

Diagnosis: Zelotes andreinii is closest to *Z. kulempikus* but can be distinguished by the smaller embolar base which is only just visible retrolaterally, and the larger median apophysis on the male palp (Figs. 187–188 cf. Figs. 195–196). Females are easily distinguished from other species of *Zelotes* by the widely separated lateral epigynal margins and by the structure of the ducts (Figs. 189–190). Colour: dark brown throughout.

Male: Total length 6.66. Carapace 3.33 long, 2.29 wide. Femur II length 1.67. Eye sizes and interdistances: AME 0.07, ALE 0.10, PME 0.10, PLE 0.10; AME-AME 0.05, AME-ALE 0.01, PME-PME 0.05, PME-PLE 0.05, AME-PME 0.10, ALE-PLE 0.05. Palp (Figs. 187–188): EMB with winged flange, EB barely visible, MA larger than in *Z. kulempikus*. Leg spination: Pa IV r0-1-0, Mt II v2-1-0.

Female: Total length 7.60. Carapace 3.33 long, 2.27 wide. Femur II length 1.81. Eye sizes and interdistances: AME 0.10, ALE 0.10, PME 0.10, PLE 0.10; AME-AME 0.05, AME-ALE 0.01, PME-PME 0.05, PME-PLE 0.05, AME-PME 0.13, ALE-PLE 0.07. Epigynum (Figs. 189–190): LEM widely separated posteriorly, MED enlarged anteriorly. Leg spination: Pa IV r0-1-0; Ti III r1-1-1.

Material examined: ETHIOPIA: Addis Ababa, 20 June 1983, A. Russell-Smith, 25 19, NMBZ A12882; Ghinda, 29 December 1900, A. Andreini, 19 (holotype), MZUF; Gorge of Bole Stream S of ILCA HQ, Addis Ababa, 27 September 1992, A. Russell-Smith, 29, NMBZ A12881. UGANDA: Queen Elizabeth National Park, July 1994, D. Penney, 19, MRAC 210.059. *Distribution*: Known only from Ethiopia and Uganda (Map 16).

Zelotes guineanus (Simon, 1907) (Figs. 191–194, Map 16)

Melanophora guineana Simon, 1907: 235 (Dº).

- *Prosthesima tristella* Tullgren, 1910: 110, pl. 1, fig. 25a-c (D♂♀). Syn. n.
- Zelotes guineanus: Giltay, 1935: 16; Roewer, 1955: 464; Bonnet, 1959: 4926; Platnick, 2005.
- Zelotes tristellus: Giltay, 1935: 18; Roewer, 1955: 466; Bonnet, 1959: 4957; Platnick, 2005.

Remarks: The characteristic shape of the female ducts of *Z. tristellus* is identical to that of *Z. guineanus*, thus *Z. tristellus* is considered a junior synonym of *Z. guineanus*. The type of *Zelotes tarsalis* Fage, 1929, known only from the male, could not be traced, but the illustration (fig. 4) somewhat resembles this species, although the embolus is slightly shorter.

Diagnosis: Males of *Zelotes guineanus* can be distinguished from those of both *Z. andreinii* and *Z. kulempikus* by the prong midway along the embolus of the palp (Fig. 192 cf. Figs. 188 and 196), and females by the coiled median ducts of the epigynum (Fig. 194). Colour: dark brown throughout.

Male: Total length 7.64. Carapace 3.61 long, 2.86 wide. Femur II length 2.14. Eye sizes and interdistances: AME 0.10, ALE 0.12, PME 0.10, PLE 0.10; AME-AME



Figs. 187–190: Zelotes andreinii Reimoser, 1937. **187** Palp, ventral view; **188** Palp, retrolateral view; **189** Epigynum, ventral view; **190** Epigynum, dorsal view. Scale line=0.2 mm.



Figs. 191–194: Zelotes guineanus (Simon, 1907). **191** Palp, ventral view; **192** Palp, retrolateral view; **193** Epigynum, ventral view; **194** Epigynum, dorsal view. Scale line=0.2 mm.

0.10, AME-ALE 0.01, PME-PME 0.12, PME-PLE 0.04, AME-PME 0.13, ALE-PLE 0.05. Palp (Figs. 191–192): EMB with prong medially, retrolateral prong present on EB. Leg spination: Ti III r1-1, p2-1-1; Mt II v2-2-0.

Female: Total length 9.63. Carapace 3.53 long, 2.83 wide. Femur II length 2.22. Eye sizes and interdistances: AME 0.10, ALE 0.15, PME 0.12, PLE 0.10; AME-AME 0.10, AME-ALE 0.01, PME-PME 0.07, PME-PLE 0.08, AME-PME 0.12, ALE-PLE 0.05. Epigynum (Figs. 193–194): MED tightly coiled posteriorly, enlarged and looped anteriorly. Leg spination: Ti III r1-1-1, p2-1-1; Mt II v2-2-0.

Material examined: BURUNDI: Mugera, 1949, R. Laurent, 19, MRAC 69580. DEMOCRATIC REPUBLIC OF CONGO: Gombe-Matadi, April 1948, D. E. Dartevelle, 13, MRAC 061.618. CAMEROON: Ebolowa: 1 August 1979, M. C. Day, 13, BMNH; 3 August 1979, 19, BMNH; 4 November 1979, 23 39, BMNH; 20 November 1979, 23 49, BMNH; January-March 1980, 19, BMNH; March 1980, 43 39, BMNH; December 1980, 43 79, BMNH; 1980, 29, BMNH. GUINEA BISSAU: Rio Cassine, L. Fea, 19 (holotype of guineanus), MCSN. IVORY COAST: Marahoué Ranch, Mankono, January 1980, J. Everts, 13 59, MRAC 172.321; December 1979, 13, MRAC 172.324; Pakodji, 27 December 1983, E. Bouaflé, 13 29, MRAC 174.038. KENYA: Kaibos, 15 August 1972, J. Murphy, 19, JM 1918; Kamatira, 21 August 1984, J. Murphy, 19, JM 12064; 23 August 1972, 19, JM 2125; Kijabé, 19, MNHN AR1898; Kitale, August 1984, J. Murphy, 1d, JM 11933; 1d, JM 2080; Nairobi, 10 April 1988, A. Russell-Smith, 1d 19, NMBZ A13569. NIGERIA: Ibadan: 26–30 October 1973, A. Russell-Smith, 2d 19, AMNH; 18 October 1973, W. K. Whitney, 19, BMNH; 8 October 1973, 4d 39, BMNH; 2d 19, AMNH. RWANDA: Gitarama, January–February 1953, P. Basilewsky, 1d, MRAC 075.276. TANZANIA: Kibondo, Kilimanjaro, August 1905, Y. Sjöstedt, 1d 109 (syntypes of *tristellus*), NREA.

Distribution: Tropical Africa (Map 16).

Zelotes kulempikus sp. n. (Figs. 195–196, Map 16)

Types: Male holotype from Kwaisagat, Kenya, September 1984 (J. Murphy), deposited in MRAC.

Etymology: The specific name is an adjective derived from the Ndebele for winged, referring to the winged extension on the male embolus.

Diagnosis: Zelotes kulempikus is closest to *Z. andreinii* but can be distinguished by the smaller median apophysis and low embolar base which is visible anterior to the terminal apophysis throughout its length (Figs. 195–196 cf. Figs. 187–188). Colour: brown throughout.

Male: Total length 8.17. Carapace 3.75 long, 2.75 wide. Femur II length 2.33. Eye sizes and interdistances: AME 0.12, ALE 0.12, PME 0.12, PLE 0.12; AME-AME 0.05, AME-ALE 0.01, PME-PME 0.06, PME-PLE 0.04, AME-PME 0.10, ALE-PLE 0.05. Palp (Figs. 195–196): EB visible along entire length, MA smaller than in *Z. andreinii*. Leg spination: Pa IV r0-1-0; Ti III r1-1-1; Mt II v2-2-0.

Female: Unknown.

Material examined: Only the holotype.

Distribution: Known only from the type locality (Map 16).



Figs. 195–196: Zelotes kulempikus sp. n. **195** Palp, ventral view; **196** Palp, retrolateral view. Scale line=0.2 mm.



Map 16: Distribution of Zelotes andreinii ▲, Z. guineanus ● and Z. kulempikus ○ in Africa.

The natalensis group

Diagnosis: Males of the *natalensis* group have a bizarre palp with the embolus originating prolaterally. The terminal apophysis is sheet-like with a prolateral prong-like extension. The lateral margins of the female epigynal plate are close together and form a "V"-shaped opening. The lateral ducts are expanded into large lobes.

Zelotes natalensis Tucker, 1923 (Figs. 197-200, Map 17)

- Zelotes natalensis Tucker, 1923: 367, pl. 11, fig. 72 (D\$); Giltay, 1935: 17; Lawrence, 1937: 224; 1938: 477; 1947: 11 (D\$); Roewer, 1955: 465; Bonnet, 1959: 4936; Lawrence & Croeser, 1980: 155; Van den Berg & Dippenaar-Schoeman, 1991: 248; Platnick, 2005.
- Zelotes ungula Tucker, 1923: 374–376, pl. 11, fig. 78a–b (Dδ^φ); Roewer, 1955: 466. Syn. n.

Zelotes ungulus: Giltay, 1935: 8; Bonnet, 1959: 4957; Platnick, 2005.

Remarks: I have examined the types of *Z. natalensis* and *Z. ungulus* and have found them to be identical. *Zelotes natalensis* has page priority over *Z. ungulus*.

Diagnosis: Males of *Zelotes natalensis* can easily be distinguished by the very long circular embolus (Figs. 197–198). The lateral margins of the female epigynal plate are close to the anterior margins, and the median ducts are long and coiled (Figs. 199–200). Colour: light brown/orange throughout.

Male: Total length 6.42. Carapace 2.92 long, 2.08 wide. Femur II length 2.08. Eye sizes and interdistances: AME 0.10, ALE 0.12, PME 0.10, PLE 0.12; AME-AME 0.03, AME-ALE 0.01, PME-PME 0.04, PME-PLE 0.02, AME-PME 0.10, ALE-PLE 0.03. Palp (Figs. 197–198): EMB very long and circular, originating prolaterally, TA bifid, cymbium rounded. Leg spination: Ti III r1-11; Mt I & II v2-2-0.



Figs. 197–200: Zelotes natalensis Tucker, 1923. 197 Palp, ventral view; 198 Palp, retrolateral view; 199 Epigynum, ventral view; 200 Epigynum, dorsal view. Scale line=0.2 mm.

Female: Total length 6.67. Carapace 3.33 long, 2.50 wide. Femur II length 1.92. Eye sizes and interdistances: AME 0.10, ALE 0.12, PME 0.11, PLE 0.11; AME-AME 0.05, AME-ALE 0.01, PME-PME 0.02, PME-PLE 0.04, AME-PME 0.08, ALE-PLE 0.05. Epigynum (Figs. 199–200): LEM close to AEM, MED long and coiled, LED form huge bulbs. Leg spination: Ti III r1-1.

Material examined: SOUTH AFRICA: Brits: 1984-85, R. Watmough, 78 19, PPRI 89/1036; 28, PPRI 87/11; Buffelsfontein Farm, 11 November 1980, D. Uys, 19, PPRI 83/467; Dawns Pride Farm, September-October 1980, H. D. Shaw-Copeland, 19, MRAC 166.501; Donkerhoek Farm, 6 August 1979, D. Uys, 19, PPRI 86/450; Droogelaagte Farm, 9 May 1979, J. L. Smit, 13, PPRI 86/422; Duikersfontein Farm: 8 May 1979, S. Pretorius, 13, PPRI 89/1114; 29 May 1978, M. Stiller, 13, PPRI 86/123; Dunbrody, 1902, J. O'Neill, 1d, SAMC 12432; 1898, 1d, SAMC 8437; Empangeni, 4 June 1983, M. Filmer, 1d, PPRI 87/202; Inyalazi River, July 1915, H. W. Bell-Marley, 1º (holotype of natalensis), SAMC B1326; Kalkfontein Farm, 3 January 1980, D. Uys, 23, PPRI 83/481; Kroondal, 3 October 1980, D. Uys, 38 19, PPRI 94/43; Lajuma Farm: 3 May 1997, M. van der Merwe, 18, PPRI 98/21; 11 June 1997, 18, PPRI 98/22; Mfongosi, February 1918, W. E. Jones, 18 19 (syntypes of ungula), SAMC B4158; Middelburg, 8 May 1991, M. de Jager, 13, PPRI 91/1060; Mzimhlava River mouth, February 1980, M. Baddeley, 19, MRAC 166.615; Ndumo Game Reserve, 8 July 2002, C. Haddad, 19, PPRI; Ntafutu River Transkei Coast, February-March 1980, M. Baddeley, 19, MRAC 166.747; Nyala Game Reserve, 28 November 1981, P. Reavell, 19, ex PPRI 92/287; Pongola, 27 June 1968, H. van Ark, 19, PPRI 89/1065; Pretoria: 12 April 1922, G. P. F. van Dam, 13, TMSA 13173; 15 June 1990, B. Sunkel, 13, PPRI 90/173; 17 July 1989, 19, PPRI 89/636; 7 April 1994, J. Keytel, 18, PPRI 94/274; 12 June 1978, D. Uys, 38, PPRI 86/307; 9 December 1980, 38 19, PPRI 83/474; 5 December 1979, 1º, PPRI 86/211; 20 April 1987, J. M. Mulders, 1º, PPRI 90/339; 30 June 1960, H. Vari, 19, TM 16438; 8 April 1985, G. van den Berg, 18 19, PPRI 85/130; 12 August 1990, B. Sunkel, 19, PPRI 90/414; Reitfontein Farm, 19 May 1991, M. Filmer, 19, PPRI 91/1081; Reitondale Research Station: 13 September 1988, A. van den Berg & A. Briggs, 19, PPRI 89/12; 11 October 1988, 19, PPRI 89/173; 11 May 1998, 19, PPRI 2000/136; 1 October 1988, T. Bird, 23, PPRI 002/981; Richards Bay, 10 December 1995, T. Wassenaar, 19, PPRI 99/340; Rust de Winter, 21 April 1981, M. Stiller, 1*d*, PPRI 85/228; Settlers Farm: 8 February 1980, D. Uys, 1*d*, PPRI 2000/161; 18 July 2001, M. van Jaarsveld, 2*q*, PPRI 2003/44; 17 September 2002, 1*q*, PPRI 2003/351; 14 November 2002, 1*q*, PPRI 2003/426; Sundays River: 23 January 1999, H. Potgeiter, 8*d* 5*q*, PPRI 2000/229; 11 May 1999, P. Stephens, 6*d*, PPRI 99/240; Swartberg Nature Reserve: December 1998, Z. van der Walt, 1*q*, PPRI 2000/11; 15 March 2001, 2*d* 1*q*, PPRI 2003/984; Verwoerdburg, 6 April 1978, D. Uys, 1*d*, PPRI 86/394.

Distribution: South Africa (Map 17).

Natural history: Adults appear to be active throughout the year.

Zelotes uquathus sp. n. (Figs. 201-204, Map 17)

Type: Female holotype from Canton, Rust 280, South Africa, August 1923 (G. P. van Dam), deposited in TMSA (13486).

Etymology: The specific name is an adjective derived from the Ndebele for thickened, referring to the sclerotised MED of the female.

Diagnosis: Males of *Zelotes uquathus* can be distinguished by the short embolus, just visible behind the TA and conductor tissue (Figs. 201–202). The median ducts of the female are shorter than in *Z. natalensis* and heavily sclerotised (Figs. 204 cf. Fig. 200). Colour: legs and carapace light brown, abdomen grey.

Male: Total length 7.5. Carapace 3.33 long, 2.50 wide. Femur II length 2.08. Eye sizes and interdistances: AME 0.13, ALE 0.13, PME 0.15, PLE 0.15; AME-AME 0.03, AME-ALE 0.01, PME-PME 0.03, PME-PLE 0.03, AME-PME 0.11, ALE-PLE 0.05. Palp (Figs. 201–202): Embolus short, TA short and sloping. Leg spination: Ti III r1-1-1; Mt II v2-1-0, III v2-2-2.

Female: Total length 8.75. Carapace 3.75 long, 2.72 wide. Femur II length 2.08. Eye sizes and interdistances:



Figs. 201–204: Zelotes uquathus sp. n. 201 Palp, ventral view; 202 Palp, retrolateral view; 203 Epigynum, ventral view; 204 Epigynum, dorsal view. Scale line=0.2 mm.



Map 17: Distribution of Z. natalensis \bullet and Z. uquathus \square in South Africa.

AME 0.11, ALE 0.11, PME 0.13, PLE 0.11; AME-AME 0.05, AME-ALE 0.01, PME-PME 0.03, PME-PLE 0.03, AME-PME 0.10, ALE-PLE 0.05. Epigynum (Figs. 203–204): MED wide and sclerotised, anteriorly enlarged into bulbs, LED and LEM short, PEM displaced posteriorly. Leg spination: Ti III r1-1-1; Mt II v2-2-0, III r1-2-2.

Other material examined: SOUTH AFRICA: Hectorspruit: 27 October 1998, P. Stephens, 1ð, PPRI 99/178; 12 October 1998, 1ð, PPRI 99/196; Ndumo Game Reserve, Shokwe Pan, 9 January 2002, C. Haddad, 1º, NMBZ A14416; Priel 281, July 1986, museum staff, 1º, BMSA 1864; Ubombo Mt., 1929, B. Marley, 2º, MRAC 137.484.

Distribution: South Africa (Map 17).

Various species not placed in groups

Zelotes bambari sp. n. (Figs. 205-208, Map 18)

Types: Male holotype and female paratype from Bambari, Central African Republic, February 1969 (G. Pierrard), deposited in MRAC (136.622).

Etymology: The specific name is a noun in apposition taken from the type locality.

Diagnosis: Males of *Zelotes bambari* can be distinguished by the long embolus which has a large knob-like enlargement proximally, and by the embolar base which has a broad prong visible anterior to the terminal apophysis (Figs. 205–206). The epigynum of the female is characteristic, the lateral margins are "S"-shaped, wider posteriorly, and the median ducts are coiled longitudinally (Figs. 207–208). Colour: brown throughout.

Male: Total length 7.08. Carapace 3.33 long, 2.08 wide. Femur II length 2.08. Eye sizes and interdistances: AME 0.10, ALE 0.10, PME 0.15, PLE 0.11; AME-AME 0.07, AME-ALE 0.01, PME-PME 0.02, PME-PLE 0.05, AME-PME 0.12, ALE-PLE 0.05. Palp (Figs. 205–206): EMB long with knob-like enlargement proximally. Leg spination: typical for genus.

Female: Total length 8.75. Carapace 3.75 long, 2.75 wide. Femur II length 2.25. Eye sizes and interdistances: AME 0.12, ALE 0.12, PME 0.15, PLE 0.12; AME-AME 0.04, AME-ALE 0.01, PME-PME 0.02, PME-PLE 0.03, AME-PME 0.10, ALE-PLE 0.05. Epigynum (Figs. 207–208): MED coiled longitudinally, with blind-ending ducts. Leg spination: Ti III r1-1-1, p2-1-1.

Other material examined: CENTRAL AFRICAN REPUBLIC: Bozoum, Mr Tessman, 19, ZMHB 28718.

Distribution: Known only from Central Africa (Map 18).

Zelotes banana sp. n. (Figs. 209–210, Map 18)

Type: Male holotype from Banana, Democratic Republic of Congo, 1948 (E. Dartevelle), deposited in MRAC (067378).

Etymology: The specific name is a noun in apposition taken from the type locality.

Diagnosis: Zelotes banana can be distinguished by the short distally originating embolus which has a translucent enlargement at its proximal end (Figs. 209– 210). Colour: carapace and legs light brown, femora, patellae and tibiae darker, abdomen grey.

Male: Total length 4.42. Carapace 2.33 long, 1.67 wide. Femur II length 1.25. Eye sizes and interdistances:



Figs. 205–208: Zelotes bambari sp. n. 205 Palp, ventral view; 206 Palp, retrolateral view; 207 Epigynum, ventral view; 208 Epigynum, dorsal view. Scale line=0.2 mm.



Map 18: Distribution of Zelotes bambari \land , Z. banana \land , Z. bassari \urcorner , Z. butembo \land , Z. cassinensis \bullet , Z. comparilis \blacksquare and Z. donnanae \triangle in central and western Africa.

AME 0.10, ALE 0.10, PME 0.10, PLE 0.10; AME-AME 0.05, AME-ALE 0.01, PME-PME 0.01, PME-PLE 0.05, AME-PME 0.08, ALE-PLE 0.05. Palp (Figs. 209–210): EMB short, with translucent enlargement at proximal end, embolar base low. Leg spination: Fe IV r0-0-1, p0-0-1; Ti II v0-1-0.

Female: Unknown

Material examined: Only the holotype.

Distribution: Known only from the type locality (Map 18).



Figs. 209–210: Zelotes banana sp. n. 209 Palp, ventral view; 210 Palp, retrolateral view. Scale line=0.2 mm.

Zelotes bassari sp. n. (Figs. 211-212, Map 18)

Type: Male holotype from Bassari, Togo, May–July 1984 (P. Douben), deposited in MRAC (174045).

Etymology: The specific name is a noun in apposition taken from the type locality.

Diagnosis: *Zelotes bassari* can be distinguished by the bifid tibial apophysis and short embolus (Figs. 211–212). Colour: dark brown throughout.

Male: Total length 7.92. Carapace 4.17 long, 3.00 wide. Femur II length 2.50. Eye sizes and interdistances: AME 0.12, ALE 0.12, PME 0.14, PLE 0.14; AME-AME 0.05, AME-ALE 0.01, PME-PME 0.04, PME-PLE 0.05, AME-PME 0.12, ALE-PLE 0.04. Palp (Figs. 211–212): EMB short and curved, tibial apophysis bifid, EB broad. Leg spination: Ti III r1-1-1.

Female: Unknown.

Other material examined: IVORY COAST: N of Korhogo, Bandama River, May 1980, J. Everts, 2ð, MRAC 172342.

Distribution: Known from the Ivory Coast and Togo (Map 18).

Zelotes brennanorum sp. n. (Figs. 213-216, Map 19)

Types: Male holotype from Bulawayo, Zimbabwe, 13 May 1999 (P. & K. Brennan), deposited in NMBZ (A13309). Paratype female, Bulawayo, 30–31 May 1999 (P. & K. Brennan), NMBZ (A13310).

Etymology: The specific name is a patronym in honour of my parents, the collectors of the types.

Diagnosis: *Zelotes brennanorum* is an easily distinguishable species. The male has a broad finger-like extension on the TA and a distally originating median apophysis with a long blade-like extension; the embolus



Figs. 211–212: Zelotes bassari sp. n. **211** Palp, ventral view; **212** Palp, retrolateral view. Scale line=0.2 mm.

curves ventral to the median apophysis (Figs. 213–214). The anterior margins of the female epigynal plate are widely separated, and the lateral margins strongly curved (Fig. 215). Colour: black throughout.

Male: Total length 7.44. Carapace 3.56 long, 2.50 wide. Femur II length 2.08. Eye sizes and interdistances: AME 0.08, ALE 0.08, PME 0.09, PLE 0.08; AME-AME 0.05, AME-ALE 0.01, PME-PME 0.07, PME-PLE 0.03, AME-PME 0.10, ALE-PLE 0.04. Palp (Figs. 213–214): TA with a broad finger-like extension, EMB distally curving ventral to MA, MA with long blade-like extension. Leg spination: Fe IV p0-0-1; Pa III p0-1-0, IV r0-1-0; Ti III r1-1-1, IV r2-1-1.

Female: Total length 7.58. Carapace 3.42 long, 2.50 wide. Femur II length 2.17. Eye sizes and interdistances: AME 0.10, ALE 0.10, PME 0.10, PLE 0.09; AME-AME 0.06, AME-ALE 0.01, PME-PME 0.10, PME-PLE 0.07, AME-PME 0.11, ALE-PLE 0.05. Epigynum (Figs. 215–216): MED folded dorsally onto themselves, AEM widely separated. Leg spination: Fe IV p0-0-1; Pa III p0-1-0, IV r0-1-0; Ti III r1-1-1, IV r2-1-1.

Other material examined: MALAWI: Chisasira Forest, Chintheche: 5 June 1978, R. Jocqué, 1*ö*, MRAC 153.033; 2–20 May 1978, 2*ö*, MRAC 153.766. ZIMBABWE: Kemavanga Camp: 8–11 April 1991, F. Nyathi, 2*ö*, NMBZ A9029; 3*ö* 1*♀*, NMBZ A9030; New Brixton Farm, 27–29 April 2001, 1*ö*, V. Amos, NMBZ A14720; Pomongwe: 15 June 2004, 1*♀*, J. Ives, NMBZ A14741; 20–27 July 2004, 1*♀*, M. FitzPatrick, NMBZ A14860; April 2005, 1*ö* 1*♀*, NMBZ A15439; May 2005, 1*♀*, NMBZ A15475; June 2005, 1*ö* 2*♀*, NMBZ A15793.

Distribution: Malawi and Zimbabwe (Map 19). Natural history: Collected in pitfall traps in April–July.

Zelotes butembo sp. n. (Figs. 217-218, Map 18)

Type: Female holotype from Butembo, Democratic Republic of Congo, February–March 1975, (M. Lejeune), deposited in MRAC (161.346).

Etymology: The specific name is a noun in apposition taken from the type locality.

Diagnosis: Zelotes butembo can be distinguished easily

by the shape of the epigynal plate (Fig. 217). Colour: brown throughout.

Female: Total length 7.08. Carapace 2.92 long, 2.08 wide. Femur II length 1.83. Eye sizes and interdistances: AME 0.10, ALE 0.10, PME 0.12, PLE 0.10; AME-AME 0.07, AME-ALE 0.02, PME-PME 0.05, PME-PLE 0.05, AME-PME 0.06, ALE-PLE 0.03. Epigynum (Figs. 217–218): MED simple, extremely short. Leg spination: Fe IV r0-0-1, p0-0-1; Ti III r1-1-1; Mt I & II v2-2-0.

Male: Unknown.

Other material examined: DEMOCRATIC REPUBLIC OF CONGO: Kilindera Camp, Ruwenzori Mts, July–August 1974, M. Lejeune, 2º, MRAC 155.173.

Distribution: Known only from the Democratic Republic of Congo (Map 18).

Zelotes cassinensis sp. n. (Figs 219-220, Map 18)

Type: Male holotype from Rio Cassine, Guinea-Bissau (L. Fea), deposited in MCSN.

Etymology: The specific name refers to the type locality.

Diagnosis: Zelotes cassinensis can be distinguished by the retrolateral winged extension on the embolar base and the very long embolus (Figs. 219–220). Colour: dark brown throughout.

Male: Total length 7.08. Carapace 3.33 long, 2.75 wide. Femur II length 2.17. Eye sizes and interdistances: AME 0.10, ALE 0.10, PME 0.10, PLE 0.10; AME-AME



Figs. 213–216: Zelotes brennanorum sp. n. 213 Palp, ventral view; 214 Palp, retrolateral view; 215 Epigynum, ventral view; 216 Epigynum, dorsal view. Scale line=0.2 mm.



Figs. 217–218: Zelotes butembo sp. n. 217 Epigynum, ventral view; 218 Epigynum, dorsal view. Scale line=0.2 mm.

0.03, AME-ALE 0.01, PME-PME 0.05, PME-PLE 0.02, AME-PME 0.10, ALE-PLE 0.05. Palp (Figs. 219–220): EMB long, retrolateral winged extension on EB distinctive. Leg spination: Pa IV r0-1-0; Ti III r1-1-1; Mt III r2-2-2, IV r2-2-2, p1-2-2.

Female: Unknown.

Material examined: Only the holotype.

Distribution: Known only from the type locality (Map 18).

Zelotes comparilis (Simon, 1885) (Figs. 221–224, Map 18)

Prosthesima comparilis Simon, 1885: 383 (DQ).

Zelotes comparilis: Roewer, 1955: 463; Bonnet, 1959: 4919 (comparabilis); Platnick, 2005.

Diagnosis: Males of *Zelotes comparilis* can be distinguished by the short terminal apophysis, and the flat embolar base with a prolateral prong and small retrolateral beak-like extension (Figs. 221–222). The pos-



Figs. 219–220: Zelotes cassinensis sp. n. **219** Palp, ventral view; **220** Palp, retrolateral view. Scale line=0.2 mm.

terior margin of the female epigynum is short, anterior margins enlarged, and ducts characteristic (Figs. 223–224). Colour: brown throughout.

Male: Total length 7.08. Carapace 3.33 long, 2.50 wide. Femur II length 2.50. Eye sizes and interdistances: AME 0.10, ALE 0.12, PME 0.12, PLE 0.12; AME-AME 0.05, AME-ALE 0.01, PME-PME 0.05, PME-PLE 0.05, AME-PME 0.09, ALE-PLE 0.04. Palp (Figs. 221–222): EMB long and thin, TA short and truncated, EB with prolateral prong. Leg spination: Ti III r1-1.

Female: Total length 6.67. Carapace 3.33 long, 2.75 wide. Femur II length 2.08. Eye sizes and interdistances: AME 0.10, ALE 0.10, PME 0.15, PLE 0.15; AME-AME 0.05, AME-ALE 0.02, PME-PME 0.05, PME-PLE 0.04, AME-PME 0.08, ALE-PLE 0.05. Epigynum (Figs. 223–224): MED longitudinal, widened posteriorly, PEM short and straight, AEM enlarged. Leg spination: Ti III r1-11, p2-1-1, IV r2-1-1, p2-1-1; Mt II v2-1-0.

Material examined: BURKINA FASO: North Yatenga, Ouahigouya, July-October 1992, M. N. De Visscher & G. Balança, 19, MRAC 174.737; Sissamba: 23 October 1993, M. N. De Visscher & G. Balança, 19, MRAC 207.787; 19 October 1993, 13 19, MRAC 209.865. SENEGAL: Dakar, 1882, 19 (holotype), MNHN AR1882.

Distribution: Known only from Senegal and Burkina Faso (Map 18).



Figs. 221–224: Zelotes comparilis (Simon, 1885). 221 Palp, ventral view; 222 Palp, retrolateral view; 223 Epigynum, ventral view; 224 Epigynum, dorsal view. Scale line=0.2 mm.



Map 19: Distribution of Zelotes brennanorum ○, Z. doddieburni ▲, Z. florisbad ▶, Z. frenchi ● and Z. gooldi ■ in southern Africa.

Zelotes doddieburni sp. n. (Figs. 225-228, Map 19)

Types: Male holotype from Hunters Camp, Doddieburn Ranch, Zimbabwe, 20 April 1986 (F. Nyathi), deposited in NMBZ (A4631). Paratypes: 19, same data, NMBZ (A4631); same locality: 15 April 1986, F. Nyathi, 13, NMBZ (A4490); 19 April 1986, 19, NMBZ (A4622).

Etymology: The specific name refers to the type locality.

Diagnosis: Males of *Zelotes doddieburni* can be distinguished by the ridged terminal apophysis and the large twisted retrolateral outgrowth on the embolar base (Figs. 225–226). The shape of the female epigynum (Fig. 227) separates *Z. doddieburni* from all other species of the genus. Colour: brown throughout.

Male: Total length 6.08. Carapace 2.75 long, 2.08 wide. Femur II length 1.67. Eye sizes and interdistances: AME 0.10, ALE 0.10, PME 0.12, PLE 0.10; AME-AME 0.04, AME-ALE 0.01, PME-PME 0.03, PME-PLE 0.05, AME-PME 0.10, ALE-PLE 0.05. Palp (Figs. 225–226): EMB very long, TA ridged, EB with twisted retrolateral outgrowth. Leg spination: Ti I & II v0-1-0, III r1-1-1, IV r2-1-1, p2-1-1; Mt I & II v2-2-0.

Female: Total length 6.75. Carapace 3.00 long, 2.33 wide. Femur II length 1.92. Eye sizes and interdistances: AME 0.12, ALE 0.12, PME 0.12, PLE 0.12; AME-AME 0.06, AME-ALE 0.01, PME-PME 0.05, PME-PLE 0.03, AME-PME 0.10, ALE-PLE 0.05. Epigynum (Figs. 227–228): MED short, coiled, LED joined anteri-

orly, PED long. Leg spination: Fe IV p0-0-1; Ti III r1-1, IV r2-1-1, p2-1-1; Mt I v0-0-0.

Other material examined: SOUTH AFRICA: Wyliespoort, 29 June 1972, E. S. Ross, 19, CALC. ZIMBABWE: Chipinda Pools, 12 June 1984, P. Kagoro, 13, NMBZ A2649.

Distribution: Known from southern Zimbabwe and Northern Province of South Africa (Map 19).

Zelotes donnanae sp. n. (Figs. 229–230, Map 18)

Types: Female holotype and 19 paratype from Kahuzi Summit, Democratic Republic of Congo, January 1959 (N. Leleup), deposited in MRAC (113.337).

Etymology: The specific name is a patronym in honour of Karen Donnan who assisted in the initial stages of this study.

Diagnosis: Zelotes donnanae can be distinguished by the widely curved lateral margins of the epigynal plate and the simple median ducts (Figs. 229–230). Colour: carapace and legs light brown, abdomen grey.

Female: Total length 4.25. Carapace 1.67 long, 1.38 wide. Femur II length 0.83. Eye sizes and interdistances: AME 0.07, ALE 0.07, PME 0.07, PLE 0.07; AME-AME 0.04, AME-ALE 0.01, PME-PME 0.03, PME-



Figs. 225–228: Zelotes doddieburni sp. n. 225 Palp, ventral view; 226 Palp, retrolateral view; 227 Epigynum, ventral view; 228 Epigynum, dorsal view. Scale line= 0.2 mm.



Figs. 229–230: Zelotes donnanae sp. n. **229** Epigynum, ventral view; **230** Epigynum, dorsal view. Scale line=0.2 mm.

PLE 0.02, AME-PME 0.05, ALE-PLE 0.02. Epigynum (Figs. 229–230): MED simple, PED stalked, LEM widely curved. Leg spination: Fe III & IV r0-0-1, p0-0-1; Mt I & II v2-2-0.

Male: Unknown.

Material examined: Only the types.

Distribution: Known only from the type locality (Map 18).

Zelotes florisbad sp. n. (Figs. 231-232, Map 19)

Type: Male holotype from Florisbad, South Africa, March 1983 (museum staff), deposited in BMSA (1921).

Etymology: The specific name is a noun in apposition taken from the type locality.

Diagnosis: *Zelotes florisbad* can be distinguished by the very long dorsally coiled embolus (Figs. 231–232). Colour: black throughout.

Male: Total length 7.25. Carapace 3.50 long, 2.67 wide. Femur II length 2.25. Eye sizes and interdistances: AME 0.10, ALE 0.10, PME 0.10, PLE 0.10; AME-AME 0.05, AME-ALE 0.01, PME-PME 0.05, PME-PLE 0.03, AME-PME 0.10, ALE-PLE 0.05. Palp (Figs. 231–232): EMB very long, thick, coiled, with proximal prong. Leg spination: typical for genus.

Female: Unknown.

Other material examined: SOUTH AFRICA: Florisbad: March 1983, museum staff, 13, BMSA 421; June 1985, 33, BMSA 719; 16–30 March 1988, 13, BMSA 4258; 43, BMSA 4262; 13, BMSA 4281; 13, BMSA 4264.

Distribution: Known only from the type locality (Map 19).

Natural history: Collected only in March and June.

Zelotes frenchi Tucker, 1923 (Figs. 233-236, Map 19)

Zelotes frenchi Tucker, 1923: 358–359, pl. 10, fig. 68 (D?); Giltay, 1935: 16; Roewer, 1955: 463; Bonnet, 1959: 4923; Van den Berg & Dippenaar-Schoeman, 1991: 248; Platnick, 2005.

Diagnosis: Zelotes frenchi can be distinguished by the short tibial apophysis of the male palp, together with the sinuous terminal apophysis, and finger-like extension on the embolar base (Figs. 233–234). The lateral and anterior margins of the female epigynal plate are joined into one opening (Fig. 235). Colour: carapace light brown/orange, legs and abdomen darker brown.

Male: Total length 5.11. Carapace 2.42 long, 1.81 wide. Femur II length 1.31. Eye sizes and interdistances:

AME 0.07, ALE 0.10, PME 0.13, PLE 0.10; AME-AME 0.05, AME-ALE 0.01, PME-PME 0.03, PME-PLE 0.03, AME-PME 0.10, ALE-PLE 0.04. Palp (Figs. 233–234): EMB long, prolateral extension on embolar base finger-like, tibial apophysis short. Leg spination: Pa III p0-1-0; Ti III r2-1-1, p2-1-1, IV p2-1-1, r2-2-1; Mt I & II v2-2-0.

Female: Total length 6.25. Carapace 2.50 long, 1.83 wide. Femur II length 1.19. Eye sizes and interdistances: AME 0.08, ALE 0.12, PME 0.10, PLE 0.10; AME-AME 0.05, AME-ALE 0.01 PME-PME 0.05, PME-PLE 0.05, AME-PME 0.10, ALE-PLE 0.04. Epigynum (Figs. 235–236): LEM and AEM continuous, MED simple, enlarged anteriorly. Leg spination: Pa III p0-1-0; Ti III r2-1-1, p2-1-1, IV p2-1-1, r2-2-1; Mt I & II v2-2-0.

Material examined: BOTSWANA: Maxwee, 18 February 1976, A. Russell-Smith, 13, AMNH; Nxai Pan National Park, 7 March 1976, A. Russell-Smith, 19, BMNH; 20 February 1977, 19, BMNH. SOUTH AFRICA: Bloemfontein, 10 April 1991, E. Visagie, 19, BMSA 5773; Buffelsfontein Farm, 5 January 1981, D. Uys, 13 19, PPRI 89/1112; 11 November 1980, 19, PPRI 83/465; Deelhoek, 6 March 1991, C. Haddad, 59, NMBZ A14373; 19 January 2001, 13, NMBZ A14375; Douglas, 29 May 2001, C. Haddad, 13 19, NMBZ A14395; Dwaalboom Farm, 7 August 1978, D. Uys, 19, PPRI 81/303; Florisbad: September 1982, museum staff, 19, BMSA 260; October 1982, 19, BMSA 281; 19, BMSA 321; November 1982, 29, BMSA 353; 1d, ex BMSA 356; January 1983, 29, BMSA 401; 19, BMSA 384; February 1983, 29, BMSA 413; April 1983, 19, BMSA 705; 19, BMSA 435; July 1983, 23, BMSA 482; August 1983, 19, BMSA 491; September 1983, 29, BMSA 514; 13 19, BMSA 519; May 1984, 13, BMSA 560; October 1984, 19, BMSA 632; 18, BMSA 635; November 1984, 19, BMSA 644; 19, BMSA 653; March 1985, 18, BMSA 781; April 1985, 53, BMSA 717; 63 19, ex BMSA 719; May 1985, 13, BMSA 795; June 1985, 1d, ex BMSA 863; 1d, ex BMSA 4364; July 1985, 19, BMSA 946; 19, BMSA 946; August 1985, 19, BMSA 987; September 1985, 29, BMSA 1076; 13 89, BMSA 1083; 23 49, BMSA 1075; 21 October 1985, 13 109, BMSA 1139; November 1985, 59,



Figs. 231–232: Zelotes florisbad sp. n. 231 Palp, ventral view; 232 Palp, retrolateral view. Scale line=0.1 mm.

BMSA 1251: June-September 1986, 149, BMSA 1880: 9-23 February 1987, 13, BMSA 3471; 9-23 November 1987, 39, BMSA 3396; 13, BMSA 3506; 23 November-8 December 1987, 25 19, BMSA 3624; 19, BMSA 3529; 26, ex BMSA 3625; 16, ex BMSA 3617; 19, BMSA 3543; 1ð, BMSA 3521; 8-21 December 1987, 1ð, BMSA 3710; 1ð 19, BMSA 3738; 1d 19, BMSA 3747; 21 December 1987-5 January 1988, 29, BMSA 3759; 13 19, BMSA 3764; 13 19, BMSA 3753; 19, BMSA 3776; 13 19, ex BMSA 3870; 5-19 January 1988, 19, BMSA 3949; 29, BMSA 3891; 19 January-1 February 1988, 19, BMSA 3988; 2-16 March 1988, 18, BMSA 4235; 16-30 March 1988, 38, ex BMSA 4272; 1d, ex BMSA 4288; 1d, ex BMSA 4287; 30 March-26 April 1988, 18, ex BMSA 4335; 26 April-10 May 1988, 18, BMSA 4377; 18, BMSA 4361; 24 May-8 June 1988, 13, BMSA 4455; 5-20 July 1988, 18, ex BMSA 4623; 17-30 August 1988, 18 19, ex BMSA 4799; 30 August-12 September 1988, 19, ex BMSA 4871; 12-23 September 1988, 29, BMSA 4915; 18, BMSA 4881; 23 September-6 October 1988, 18, ex BMSA 5028; 19, BMSA 4962; 6-31 October 1988, 28, ex BMSA 5142; 19, BMSA 5034; 19, BMSA 5063; 31 October-18 November 1988, 13, BMSA 5221; 29, BMSA 5151; Grant's Hill, November 1990, L. Lotz, 1º, BMSA 7371; Groblersdal: 27 October 1978, D. Uys, 19, PPRI 89/1026; 3 January 1980, 19, PPRI 83/480; 6 June 1978, 33 19, PPRI 86/320; 26 April 1978, 13, PPRI 86/381; 28 February 1980, A. S. Dippenaar, 28, PPRI 89/1034; Hartebeestpan 330, April-August 1989, museum staff, 23 29, ex BMSA 2071; Hopefield, 11 May 2001, C. Haddad, 29, NMBZ A14382; Johannesburg: 18 November 1989, M. Filmer, 19, PPRI 90/15; 7 March 1987, L. de Jager, 19, PPRI 91/596; 18 April 1987, A. M. Boekkaai, 13, PPRI 88/406; 24 November 1989, Spider Club, 33, PPRI 90/100; Kroondal, 4 December 1980, D. Uys, 13, PPRI 2003/ 132; Krugersdrift Dam, 18 April 1985, Pieterse, 13, BMSA 201; Langberg 138, July 1988, museum staff, 1d, ex BMSA 2934;



Figs. 233–236: Zelotes frenchi Tucker, 1923. 233 Palp, ventral view; 234 Palp, retrolateral view; 235 Epigynum, ventral view; 236 Epigynum, dorsal view. Scale line=0.2 mm.

Lichtenburg Farm, 28 December 1977, D. Uys, 13, PPRI 86/312; 8 May 1979, S. Pretorius, 13, PPRI 87/99; Lydenburg, 8 May 1988, M. Filmer, 19, PPRI 88/558; Maasstroom Farm, 17 August 1976, A. S. Dippenaar, 19, PPRI 76/1337; Magaliesberg, 11 April 1976, F. Wanless, 1& 19, ex PPRI 88/220; Marble Hall Farm, 6 February 1980, H. Minnaar, 19, PPRI 86/427; Naval Hill: November 1990, L. Lotz, 19, BMSA 7351; December 1990, 19, BMSA 7399; March 1991, 13, BMSA 7548; April 1991, 13, BMSA 7579; September 1991, 19, BMSA 7807; October 1991, 23, BMSA 7848; November 1991, 13 19, BMSA 7890; Pretoria: 11 April 1916, A. Roberts, 19, TMSA 18584; 24 February 1981, D. Uys, 18, PPRI 83/487; Rietondale Research Station: 11 October 1988, A. Briggs, 19, PPRI 89/179; 11 July 1988, 13, PPRI 89/138; Roedtan, 16 October 2002, M. van Jaarsveld, 13, PPRI 2003/275; Roodeplaat Dam Nature Reserve: 13 August 1986, A. Leroy, 19, PPRI 87/171; 3 April 2001, R. Jocqué, 13, MRAC 210.157; Roodepoort: 4 October 1987, A. Leroy, 19, PPRI 89/798; 15 November 1987, 1º, PPRI 91/514; 25 April 1987, 1d, PPRI 91/530; 10 April 1988, 13, PPRI 91/519; 13, PPRI 91/477; Rustenburg, 3 October 1980, D. Uys, 1º, ex PPRI 94/43; Settlers Farm: 24 March 1980, D. Uys, 13, PPRI 94/48; 25 April 1978, M. Grobler, 13, PPRI 87/706; Tuinplaas: 10 May 2001, 19 3juvs, PPRI 2003/198; 29 May 2001, 19, PPRI 2003/499; 11 July 2001, 19, PPRI 2003/540; 18 July 2001, 18, PPRI 2003/445; 19, PPRI 2003/196; 19, PPRI 2003/197; 23 39, PPRI 2003/60; 13 September 2001, 19, PPRI 2003/232; 19, PPRI 2003/235; 19, PPRI 2003/237; 19, PPRI 2003/238; 19, PPRI 2003/444; 15 September 2001, 19, PPRI 2003/497; 11 October 2001, 13 29, PPRI 2003/100; 19, PPRI 2003/101; 7 November 2001, 19, PPRI 2003/668; 19, PPRI 2003/276; M. van Jaarsveld, 19, PPRI 2003/22; 13 November 2001, 19, PPRI 2003/99; 6 December 2001, 13, PPRI 2003/1290; 19, PPRI 2003/239; 23 29, PPRI 2003/371; 19, PPRI 2003/23; 9 January 2002, 13, PPRI 2003/498; 19, PPRI 2003/536; 19, PPRI 2003/240; 19, PPRI 233; 7 May 2002, 13, PPRI 2003/1311; 19, PPRI 2003/493; 19, PPRI 2003/494; 11 June 2002, 19, PPRI 2003/410; 19, PPRI 2003/535; 13, PPRI 2003/537; 13, PPRI 2003/640; 3 July 2002, 19, PPRI 2003/539; 18 July 2002, 19, PPRI 2003/495; 21 August 2002, 18, PPRI 2003/880; 19, PPRI 2003/538; 17 September 2002, 19, PPRI 2003/667; 19, PPRI 2003/669; 19, PPRI 2003/496; 19, PPRI 2003/236; 19, PPRI 2003/98; 29, PPRI 2003/234; 19, PPRI 2003/342; 19, PPRI 2003/343; 16 October 2002, 19, PPRI 2003/877; 17 October 2002, 19, PPRI 2003/277; 19, PPRI 2003/278; 14 November 2002, 13, PPRI 2003/355; 1d, PPRI 2003/641; 19 December 2002, 19, PPRI 2003/1316; 29 January 2003, 1d 19, PPRI 2003/1291; Warmbaths Farm, 9 May 1979, J. L. Smith, 13, PPRI 89/1076; Witwatersrand Nature Reserve, 22 April 1991, A. Leroy, 19, PPRI 92/205; Witwatersrand National Botanical Gardens, 22 September 1991, A. Leroy, 19, PPRI 92/217; Wolfkop, February-April 1990, S. du Toit, 38, ex BMSA 5604. ZIMBABWE: Bulawayo: October 1962, 19, NMBZ A964; 19 May 1982, D. Broadley, 19, NMBZ A9147; 4 October 1994, H. Ashton, 19, NMBZ A12392; 12 June 2001, M. FitzPatrick, 13, NMBZ A14277; Debshan Ranch, 20 September 1990, F. Nyathi, 29, NMBZ A8567; Glenmore Farm, 27 September 1988, F. Nyathi, 19, NMBZ A7036; Insiza, 1918, G. French, 1º (holotype), SAMC B3900; Mangwe Dam, 27 September 1988, F. Nyathi, 19, NMBZ A7061.

Distribution: Botswana, South Africa and southern Zimbabwe (Map 19).

Natural history: Adults present throughout the year with peaks of activity in April–May and September– October.

Zelotes gooldi (Purcell, 1907) (Figs. 237-240, Map 19)

Melanophora gooldi Purcell, 1907: 330, pl. 15, fig. 53 (DQ).

- *Melanophora cronwrighti* Purcell, 1907: 330, pl. 15, figs. 54 & 55 (D♂♀). Syn. n.
- Zelotes cronwrighti: Tucker, 1923: 357–358; Giltay, 1935: 16; Roewer, 1955: 463; Bonnet, 1959: 4919; Russell-Smith, 1981: 153; Eagle, 1985: 136; Griffin & Dippenaar-Schoeman, 1991: 166; Platnick, 2005.
- Zelotes gooldi: Tucker, 1923: 360; Giltay, 1935: 16; Roewer, 1955: 464; Bonnet, 1959: 4925; Platnick, 2005.



Figs. 237–240: Zelotes gooldi (Purcell, 1907). 237 Palp, ventral view; 238 Palp, retrolateral view; 239 Epigynum, ventral view; 240 Epigynum, dorsal view. Scale line=0.2 mm.

Remarks: The female types of *Z. gooldi* and *Z. cronwrighti* (examined) are identical and *Z. gooldi* has line priority.

Diagnosis: Males of *Zelotes gooldi* have a rounded embolar base, with a beak-like retrolateral process, clearly visible distal to the terminal apophysis; the embolus has a distal curve (Figs. 237–238). The posterior margin of the female epigynal plate is anteriorly curved and short, and the ducts are characteristic in shape (Figs. 239–240). Colour: carapace and legs brown, abdomen grey.

Male: Total length 6.25. Carapace 2.92 long, 2.25 wide. Femur II length 1.67. Eye sizes and interdistances: AME 0.10, ALE 0.09, PME 0.10, PLE 0.08; AME-AME 0.02, AME-ALE 0.02, PME-PME 0.08, PME-PLE 0.03, AME-PME 0.10, ALE-PLE 0.06. Palp (Figs. 237–238): EMB with distal curve, EB broad and rounded, with beak-like retrolateral process. Leg spination: Ti III r1-11, p2-1-1, IV p1-1-2, r2-1-1.

Female: Total length 6.29. Carapace 2.81 long, 2.00 wide. Femur II length 1.67. Eye sizes and interdistances: AME 0.07, ALE 0.11, PME 0.10, PLE 0.10; AME-AME 0.05, AME-ALE 0.01, PME-PME 0.06, PME-

PLE 0.05, AME-PME 0.10, ALE-PLE 0.06. Epigynum (Figs. 239–240): PEM short, curved anteriorly, MED with irregular anterior enlargements, connected anteriorly. Leg spination: Ti III r2-1-1.

Material examined: NAMIBIA: Khabus 146, 14 March-14 April 1988, N. & G. Oliver, 13, SMWN 42016. SOUTH AFRICA: Bloemfontein, 17-30 September 1989, S. du Toit, 39, BMSA 3287; Burgersdorp, September 1909, Dr Krannemeyer, 18 19, SAMC B229; Caledon, July 1910, W. F. Purcell, 129, SAMC 150.072; Cradock, November 1986, museum staff, 19, BMSA 1958; August-October 1985, museum staff, 13 19, BMSA 2129; De Aar, 17-26 September 1913, W. Purcell, 19, SAMC B1591; Hanover, September-October 1901, S. C. Cronwright, 45 199 (syntypes of cronwrighti), SAMC 9477; March 1902, S. C. Schreiner, 19, SAMC 11862; September-October 1901, 13 19, SAMC 13884; Meltonwold, March-July 1989, museum staff, 4ð 109, BMSA 3240; Middelburg, 4 August 1994, R. Jocqué, 1ð, MRAC 200.832; Steenberg Cove, St Helena Bay, May 1902, J. C. Goold, 1º (holotype of gooldi), SAMC 11719; Stompneus, May-June 1902, J. C. Goold, 29, SAMC 11705; Vlagkop, December 1901, S. C. Schreiner, 1d 19, SAMC 11933; Worcester, May 1898, R. M. Lightfoot, 39, SAMC 3317.

Distribution: South Africa and southern Namibia (Map 19).

Zelotes hanangensis sp. n. (Figs. 241-242, Map 20)

Type: Female holotype from Mt. Hanang, Tanzania, 26 May 1957 (P. Basilewsky & N. Leleup), deposited in MRAC (111.963).

Etymology: The specific name refers to the type locality.

Diagnosis: Zelotes hanangensis can easily be distinguished from all other Zelotes species by the shape of the epigynum (Figs. 241–242). Colour: dark brown throughout.

Female: Total length 6.83. Carapace 2.92 long, 2.07 wide. Femur II length 1.67. Eye sizes and interdistances: AME 0.09, ALE 0.09, PME 0.09, PLE 0.09; AME-AME 0.06, AME-ALE 0.01, PME-PME 0.08, PME-PLE 0.05, AME-PME 0.08, ALE-PLE 0.04. Epigynum (Figs. 241–242): PEM anteriorly displaced by long LEM, PEM medially much closer to posterior edge of plate. MED greatly enlarged anteriorly. Leg spination: typical for genus.

Male: Unknown.

Material examined: Only the holotype.

Distribution: Known only from the type locality (Map 20).



Figs. 241–242: Zelotes hanangensis sp. n. 241 Epigynum, ventral view; 242 Epigynum, dorsal view. Scale line=0.2 mm.



Map 20: Distribution of Zelotes hanangensis ●, Z. haplodrassoides □, Z. inqayi ■, Z. itandae ⊾, Z. katombora ¬, Z. kumazomba ⊾, Z. lichenyensis ¬, Z. lutorius ○ and Z. mazumbai ▲ in Africa.

Zelotes haplodrassoides (Denis, 1955) (Figs. 243–246, Map 20)

Herpyllus haplodrassoides Denis, 1955: 106–107, fig. 4 (D^Q); Brignoli, 1983: 572.

Zelotes haplodrassoides: Levy, 1998: 113; Platnick, 2005.

Diagnosis: Males of *Zelotes haplodrassoides* can be distinguished by the distinctive shape of the embolus (Figs. 243–244), and females by the twisted median ducts which have anterior enlargements (Fig. 246). Colour: brown throughout.

Male: Total length 7.33. Carapace 3.33 long, 2.50 wide. Femur II length 2.08. Eye sizes and interdistances: AME missing, ALE 0.20, PME 0.15, PLE 0.10; ALE-ALE 0.20, PME-PME 0.00, PME-PLE 0.04, ALE-PLE 0.06. Palp (Figs. 243–244): EMB basally enlarged and twisted, short and curved distally. Leg spination: Pa IV r0-1-0; Ti III r1-1-1, IV r2-1-1, p2-1-1; Mt II v2-2-0.

Female: Total length 8.58. Carapace 3.58 long, 2.75 wide. Femur II length 2.08. Eye sizes and interdistances: AME 0.10, ALE 0.10, PME 0.15, PLE 0.10; AME-AME 0.06, AME-ALE 0.01, PME-PME 0.05, PME-PLE 0.02, AME-PME 0.16, ALE-PLE 0.09. Epigynum (Figs. 245–246): MED twisted, anteriorly enlarged. Leg spination: Pa IV r0-1-0; Ti III r1-1-1, IV r2-1-1, p2-1-1.

Material examined: ETHIOPIA: 40 km W of Mata Hara, 1 April 1987, A. Russell-Smith, 13 19, NMBZ A13576. NIGER: Mt. Tarraoudji, Air, 7–11 September 1947, L. Chopard & A. Villiers, 19 (holotype), MNHN AR9662.

Distribution: Probably occurs across the mountainous parts of north Africa, but known only from Niger and Ethiopia (Map 20).

Zelotes inqayi sp. n. (Figs. 247-248, Map 20)

Type: Female holotype from Luiswishi, Democratic Republic of Congo, 1974 (F. Malaise), deposited in MRAC (145.512).

Etymology: The specific name is a noun in apposition taken from the Ndebele for goblet, referring to the shape of the female genitalia.

Diagnosis: Zelotes inqayi can be distinguished by the longitudinal enlargements of the median ducts of the female epigynum (Fig. 248). Colour: black throughout.

Female: Total length 5.42. Carapace 2.50 long, 2.08 wide. Femur II length 1.67. Eye sizes and interdistances: AME 0.10, ALE 0.09, PME 0.10, PLE 0.09; AME-AME 0.05, AME-ALE 0.01, PME-PME 0.06, PME-PLE 0.05, AME-PME 0.06, ALE-PLE 0.03. Epigynum (Figs. 247–248): Darkened areas goblet-shaped in ventral view, MED with dorsal longitudinal enlargements. Leg spination: typical for genus.

Male: Unknown.

Material examined: Only the holotype.



Figs. 243–246: Zelotes haplodrassoides (Denis, 1955). 243 Palp, ventral view; 244 Palp, retrolateral view; 245 Epigynum, ventral view; 246 Epigynum, dorsal view. Scale line=0.2 mm.



Figs. 247–248: Zelotes inqayi sp. n. 247 Epigynum, ventral view; 248 Epigynum, dorsal view. Scale line=0.2 mm.

Distribution: Known only from the type locality (Map 20).

Zelotes itandae sp. n. (Figs. 249-250, Map 20)

Type: Female holotype from Itanda Forest, Lubero-Butembo Region, Democratic Republic of Congo, December 1974–January 1975 (M. Lejeune), deposited in MRAC (168.047).

Etymology: The specific name refers to the type locality.

Diagnosis: Zelotes itandae has a very distinctive epigynum (Figs. 249–250), separating it from all other *Zelotes* species. Colour: legs and carapace light brown, abdomen grey.

Female: Total length 5.00. Carapace 2.50 long, 1.83 wide. Femur II length 1.50. Eye sizes and interdistances: AME 0.10, ALE 0.10, PME 0.10, PLE 0.10; AME-AME 0.04, AME-ALE 0.01, PME-PME 0.07, PME-PLE 0.05, AME-PME 0.07, ALE-PLE 0.03. Epigynum (Figs. 249–250): PEM displaced posteriorly, MED twisted. Leg spination: Fe IV r0-0-1, p0-0-1; Ti II v1-1-1, III r1-1-1, IV p0-0-0; Mt I v0-1-0, II 2-2-0.

Male: Unknown.

Material examined: Only the holotype.

Distribution: Known only from the type locality (Map 20).



Figs. 249–250: Zelotes itandae sp. n. 249 Epigynum, ventral view; 250 Epigynum, dorsal view. Scale line=0.2 mm.

Zelotes katombora sp. n. (Figs. 251-252, Map 20)

Type: Male holotype from Katombora Rapids, Zimbabwe, 2 September 1986 (Falcon College & museum staff), deposited in NMBZ (A7413).

Etymology: The specific name is a noun in apposition taken from the type locality.

Diagnosis: Zelotes katombora can be distinguished by the hook-like extension at the proximal end of the embolus (Fig. 252). The embolus is long, and distally traverses the raised embolar base (Fig. 251). Tibial apophysis with prominent base. Colour: brown throughout.

Male: Total length 7.92. Carapace 3.58 long, 2.50 wide. Femur II length 2.08. Eye sizes and interdistances: AME 0.12, ALE 0.12, PME 0.14, PLE 0.12; AME-AME 0.05, AME-ALE 0.01, PME-PME 0.06, PME-PLE 0.05, AME-PME 0.12, ALE-PLE 0.05. Palp (Figs. 251–252): EMB with proximal hook-like extension. EMB long distally, traversing broad EB. Leg spination: Ti III r2-1-1, IV r2-1-1; Mt II v2-2-0.

Female: Unknown.

Material examined: Only the holotype.

Distribution: Known only from the type locality (Map 20).

Zelotes kumazomba n. sp. (Figs. 253-254, Map 20)

Type: Female holotype from Chilemba Hill, Mt. Mulanje, Malawi, 20 November 1981 (R. Jocqué), deposited in MRAC (155.912). Paratype: 1° , Sapitwa Peak, Mt Mulanje, Malawi, 12 November 1981 (R. Jocqué), MRAC 155.715.

Etymology: The specific name is a noun in apposition taken from the Ndebele word meaning "winding course", referring to the epigynal ducts.



Figs. 251–252: Zelotes katombora sp. n. **251** Palp, ventral view; **252** Palp, retrolateral view. Scale line=0.2 mm.



Figs. 253–256: **253–254** Zelotes kumazomba sp. n. **253** Epigynum, ventral view; **254** Epigynum, dorsal view. **255–256** Zelotes kuncinyanus sp. n. **255** Epigynum, ventral view; **256** Epigynum, dorsal view. Scale line=0.2 mm.

Diagnosis: Zelotes kumazomba, with its long posterior and lateral epigynal margins (Fig. 253), can be easily distinguished from other *Zelotes* species. Colour: black throughout.

Female: Total length 6.25. Carapace 2.50 long, 2.04 wide. Femur II length 1.50. Eye sizes and interdistances: AME 0.08, ALE 0.08, PME 0.10, PLE 0.08; AME-AME 0.03, AME-ALE 0.01, PME-PME 0.06, PME-PLE 0.06, AME-PME 0.10, ALE-PLE 0.04. Epigynum (Figs 253–254): PEM and LEM long, PEM centrally extended towards posterior edge. MED enlarged anteriorly. Leg spination: typical for genus.

Male: Unknown.

Material examined: Only the types.

Distribution: Known only from Mt. Mulanje, Malawi (Map 20).

Zelotes kuncinyanus sp. n. (Figs. 255–256, Map 21)

Type: Female holotype from Ruigtevlei, Sedgefield, South Africa, November 1984 (R. J. Dowsett), deposited in MRAC (166.141).

Etymology: The specific name is an adjective taken from the Ndebele word meaning small, referring to the size of the female.

Diagnosis: Zelotes kuncinyanus can be distinguished by the divergent posterior margins of the epigynal plate (Fig. 255). Colour: light brown throughout. *Female*: Total length 4.83. Carapace 1.92 long, 1.25 wide. Femur II length 1.25. Eye sizes and interdistances: AME 0.07, ALE 0.07, PME 0.07, PLE 0.07; AME-AME 0.04, AME-ALE 0.01, PME-PME 0.05, PME-PLE 0.05, AME-PME 0.07, ALE-PLE 0.04. Epigynum (Figs. 255–256): PEM divergent, LEM short, MED curving, same diameter throughout. Leg spination: Fe IV r0-0-1, p0-0-1; Pa III p0-1-0; Mt III p1-2-2.

Male: Unknown.

Material examined: Only the holotype.

Distribution: Known only from the type locality (Map 21).

Zelotes lichenyensis sp. n. (Figs. 257-258, Map 20)

Type: Female holotype from Lichenya Plateau, Mt. Mulanje, Malawi, 9–24 November 1981 (R. Jocqué), deposited in MRAC (155.996).

Etymology: The specific name refers to the type locality.

Diagnosis: The epigynal plate of *Zelotes lichenyensis* has rounded lateral and posterior margins, and the median ducts are bulbous anteriorly (Figs. 257–258). Colour: black throughout.

Female: Total length 6.66. Carapace 2.92 long, 1.83 wide. Femur II length 1.58. Eye sizes and interdistances: AME 0.10, ALE 0.10, PME 0.08, PLE 0.08; AME-AME 0.03, AME-ALE 0.01, PME-PME 0.04, PME-PLE 0.02, AME-PME 0.07, ALE-PLE 0.03. Epigynum (Figs. 257–258): PEM and LEM rounded, MED bulbous anteriorly. Leg spination: Mt I & II v0-0-0.



Figs. 257–260: 257–258 Zelotes lichenyensis sp. n. 257 Epigynum, ventral view; 258 Epigynum, dorsal view. 259–260 Zelotes lutorius (Tullgren, 1910). 259 Epigynum, ventral view; 260 Epigynum, dorsal view. Scale line=0.2 mm.

Male: Unknown.

Material examined: Only the holotype.

Distribution: Known only from the type locality (Map 20).

Zelotes lutorius (Tullgren, 1910) (Figs. 259–260, Map 20)

Drassodes lutorius Tullgren, 1910:104–105, pl. 1, fig. 15a only (D^Q) (fig. 15b=*Z. infunatus*: Levy, 1998).

Camillina lutoria: Berland, 1919: 462; Roewer, 1955: 411; Bonnet, 1956: 944.

Zelotes lutorius: Levy, 1998: 146.

Remarks: When Tullgren (1910) described *Drassodes lutorius* he illustrated two very different epigynes (figs. 15a and 15b) and clearly two different species. Levy (1998) was the first to comment on this when he transferred both species to *Zelotes*. Figure 15a (Tullgren, 1910) remains as *Zelotes lutorius* while fig. 15b was transferred to *Z. infumatus* by Levy (1998). Platnick (2005) treated *Z. lutorius* as a synonym of *Z. infumatus* and failed to retain *Z. lutorius*.

Diagnosis: Zelotes lutorius can be distinguished by the lack of lateral margins on the epigynal plate, and the simple median ducts (Figs. 259–260). Colour: specimen faded.

Female: Total length 5.17. Carapace 2.17 long, 1.50 wide. Femur II length 1.25. Eye sizes and interdistances: AME 0.10, ALE 0.12, PME 0.10, PLE 0.10; AME-AME 0.03, AME-ALE 0.01, PME-PME 0.03, PME-PLE 0.04, AME-PME 0.05, ALE-PLE 0.03. Epi-gynum (Figs. 259–260): LEM lacking, MED simple. Leg spination: Mt I v2-2-0.

Male: Unknown.

Material examined: TANZANIA: Mt. Meru, 1905–6, Y. Sjöstedt, 19 (syntype), NREA.

Distribution: Known only from the type locality (Map 20).



Figs. 261–262: Zelotes matobensis sp. n. **261** Palp, ventral view; **262** Palp, retrolateral view. Scale line=0.2 mm.



Map 21: Distribution of Z. kuncinyanus △, Z. matobensis ■, Z. mulanjensis ●, Z. nyathii ▲ and Z. qwabergensis ▲ in Africa.

Zelotes matobensis sp. n. (Figs. 261-262, Map 21)

Type: Male holotype from Maleme Rest Camp, Matobo, Zimbabwe, 14–17 February 1995 (museum staff & Girls College), deposited in NMBZ (A12089).

Etymology: The specific name refers to the type locality.

Diagnosis: *Zelotes matobensis* can be distinguished by the raised embolar base and broad embolus which has a winged tip. Colour: black throughout.

Male: Total length 5.83. Carapace 2.92 long, 2.08 wide. Femur II length 2.08. Eye sizes and interdistances: AME 0.08, ALE 0.10, PME 0.10, PLE 0.10; AME-AME 0.03, AME-ALE 0.01, PME-PME 0.02, PME-PLE 0.03, AME-PME 0.08, ALE-PLE 0.04. Palp (Figs. 261–262): EMB thick, with winged tip, EB raised and with prolateral translucent flange. Leg spination: Ti III r1-1.

Female: Unknown.

Material examined: Only the holotype.

Distribution: Known only from the type locality (Map 21).

Zelotes mazumbai sp. n. (Figs. 263-264, Map 20)

Types: Female holotype and 1° paratype from Mazumbai, West Usambara Mts, Tanzania, 1 August 1980 (M. Stoltze & N. Scharff), deposited in ZMUC.



Figs. 263–264: Zelotes mazumbai sp. n. **263** Epigynum, ventral view; **264** Epigynum, dorsal view. Scale line=0.2 mm.

Etymology: The specific name is a noun in apposition taken from the type locality.

Diagnosis: *Zelotes mazumbai* can be distinguished by the long lateral and anterior margins of the epigynal plate, and the shape of the median ducts (Figs. 263–264). Colour: black throughout.

Female: Total length 6.25. Carapace 2.50 long, 2.00 wide. Femur II length 1.67. Eye sizes and interdistances: AME 0.10, ALE 0.10, PME 0.10, PLE 0.10; AME-AME 0.05, AME-ALE 0.01, PME-PME 0.05, PME-PLE 0.03, AME-PME 0.07, ALE-PLE 0.03. Epigynum (Figs. 263–264): LEM and AEM long, MED broad anteriorly. Leg spination: Fe IV p0-0-1.

Male: Unknown.

Material examined: Only the types.

Distribution: Known only from the type locality (Map 20).

Zelotes mulanjensis sp. n. (Figs. 265-268, Map 21)

Types: Male holotype from Chilemba Hill, Mt. Mulanje, Malawi, 20 November 1981 (R. Jocqué), deposited in MRAC (156.676). Paratype 1 $^{\circ}$, from Lichenya Plateau, Mt. Mulanje, Malawi, 5–23 November 1981 (R. Jocqué), deposited in MRAC (155.867).

Etymology: The specific name refers to the type locality.

Diagnosis: Males of *Zelotes mulanjensis* can be distinguished by the raised terminal apophysis, embolar base with both a pointed prolateral and retrolateral extension, and medium length broad embolus with bifid tip (Figs. 265–266). The female epigynal plate has a median tongue-like swelling, and the median ducts are wide, and lateral ducts enlarged. Colour: carapace and legs light brown, abdomen grey.

Male: Total length 5.42. Carapace 2.50 long, 1.92 wide. Femur II length 1.50. Eye sizes and interdistances: AME 0.09, ALE 0.10, PME 0.10, PLE 0.09; AME-AME 0.04, AME-ALE 0.01, PME-PME 0.05, PME-PLE 0.03, AME-PME 0.07, ALE-PLE 0.03. Palp (Figs. 265–266): EMB broad with bifid tip and distal prong, TA raised, EB with prolateral and retrolateral processes. Leg spination: Fe IV r0-0-1, p0-0-1.

Female: Total length 6.79. Carapace 2.50 long, 2.04 wide. Femur II length 1.53. Eye sizes and interdistances:

AME 0.09, ALE 0.10, PME 0.10, PLE 0.10; AME-AME 0.06, AME-ALE 0.01, PME-PME 0.05, PME-PLE 0.04, AME-PME 0.08, ALE-PLE 0.05. Epigynum (Figs. 267–268): Tongue-like median plate, MED broad. Leg spination: Fe IV r0-0-1, p0-0-1; Ti III r1-1-1; Mt I v0-0-0.

Other material examined: MALAWI: Chilemba Hill, Mt. Mulanje, 20 November 1981, R. Jocqué, 1ð, MRAC 156.758; Lichenya Plateau, Mt. Mulanje, 5–23 November 1981, R. Jocqué, 1º, MRAC 156.461; 1º, MRAC 156.250; Thuchila, Mt. Mulanje, 11 November 1981, R. Jocqué, 1º, MRAC 156.480; Mt. Mulanje, 18 November 1981, 2ð, MRAC 156.622.

Distribution: Known only from Mt. Mulanje, Malawi (Map 21).

Zelotes nyathii sp. n. (Figs. 269–272, Map 21)

Types: Female holotype and 1º paratype from Katiyo Tea Estates, Zimbabwe, 4–5 May 1996 (F. Nyathi), deposited in NMBZ (A12634). Paratypes: 10& 5º, same locality, 2–4 May 1996, F. Nyathi, NMBZ A12627.



Figs. 265–268: Zelotes mulanjensis sp. n. 265 Palp, ventral view; 266 Palp, retrolateral view; 267 Epigynum, ventral view; 268 Epigynum, dorsal view. Scale line=0.2 mm.

Etymology: The specific name is a patronym in honour of Francis Nyathi, Curatorial Assistant, Arachnida Department (NMBZ) and collector of the types.

Diagnosis: Males of *Zelotes nyathii* can be distinguished by the distal groove on the cymbium which accommodates the distal loop of the long embolus. The median apophysis is prominent beyond the terminal apophysis (Figs. 269–270). The posterior margin of the epigynal plate is straight and displaced anteriorly by the lateral margins (Fig. 271). The median ducts are long and convoluted, with enlarged blind-ended ducts (Fig. 272). Colour: black throughout.

Male: Total length 8.00. Carapace 3.63 long, 2.92 wide. Femur II length 2.21. Eye sizes and interdistances: AME 0.12, ALE 0.12, PME 0.12, PLE 0.12; AME-AME 0.08, AME-ALE 0.01, PME-PME 0.08, PME-PLE 0.03, AME-PME 0.10, ALE-PLE 0.04. Palp (Figs. 269–270): EMB long, within groove on cymbium, MA visible beyond TA. Leg spination: Pa IV r0-1-0; Ti III r1-1-1; Mt I & II v2-2-0, IV r2-2-2.

Female: Total length 8.88. Carapace 3.75 long, 3.13 wide. Femur II length 2.29. Eye sizes and interdistances: AME 0.14, ALE 0.14, PME 0.14, PLE 0.14; AME-AME 0.10, AME-ALE 0.01, PME-PME 0.10, PME-PLE 0.05, AME-PME 0.10, ALE-PLE 0.05. Epigynum (Figs. 271–272): MED long and convoluted, with enlarged blind-



Figs. 269–272: Zelotes nyathii sp. n. 269 Palp, ventral view; 270 Palp, retrolateral view; 271 Epigynum, ventral view; 272 Epigynum, dorsal view. Scale line=0.2 mm.



Figs. 273–274: Zelotes qwabergensis sp. n. 273 Epigynum, ventral view. 274 Epigynum, dorsal view. Scale line=0.2 mm.

ending ducts, PEM straight. Leg spination: Pa IV r0-1-0; Ti III r1-1-1; Mt I & II v2-2-0, IV r2-2-2.

Other material examined: BOTSWANA: Boro River, 28 June 1977, A. Russell-Smith, 19, BMNH; Island nr Jere-Jere Lagoon, 13 July 1973, A. Russell-Smith, 29, BMNH. DEMOCRATIC REPUBLIC OF CONGO: Itombwe: May 1961, N. Leleup, 29, MRAC 164.006; June 1961, 29, MRAC 164.009; Lubondai, Rev. Stegall, 19, MRAC 065.952; Luiswishi, 1974, F. Malaise, 13, MRAC 145.512; Uvira: May 1962, Dr R. Kiss, 13, MRAC 122.796; 29, MRAC 122.797. ZIMBABWE: Marondera, 25 May 1998, S. Mpofu, 19, NMBZ A 13567; Mutare, July 1995, S. Mpofu, 19, NMBZ A13566.

Distribution: Botswana, Democratic Republic of Congo and Zimbabwe (Map 21).

Zelotes qwabergensis sp. n. (Figs. 273–274, Map 21)

Type: Female holotype from Harrismith, Qwaqwaberg, South Africa, 19 April 1994 (J. Irish), deposited in BMSA (6852).

Etymology: The specific name refers to the type locality.

Diagnosis: The form of the epigynal plate and the enlarged sheet-like ducts (Figs. 273–274) clearly separate *Z. qwabergensis* from all other *Zelotes* species. Colour: black throughout.

Female: Total length 7.92. Carapace 3.33 long, 2.50 wide. Femur II length 2.08. Eye sizes and interdistances: AME 0.10, ALE 0.10, PME 0.10, PLE 0.10; AME-AME 0.05, AME-ALE 0.01, PME-PME 0.06, PME-PLE 0.04, AME-PME 0.10, ALE-PLE 0.05. Epigynum (Figs. 273–274): MED posteriorly indistinct, as hidden by broad sheet-like extensions, PEM indistinct. Leg spination: Fe IV r0-0-1, p0-0-1; Ti III r1-1-1, IV r2-1-1.

Male: Unknown.

Material examined: Only the holotype.

Distribution: Known only from the type locality (Map 21).

Zelotes radiatus Lawrence, 1928 (Figs. 275-278, Map 22)

Zelotes radiata Lawrence, 1928: 233, pl. 21, fig. 15 (D^Q); Griffin & Dippenaar-Schoeman, 1991: 166.

Zelotes solitaria Lawrence, 1936: 148–149, fig. 2 (D^Q); Eagle, 1985: 136; Griffin & Dippenaar-Schoeman, 1991: 166. Syn. n.

Zelotes radiatus: Roewer, 1955: 465; Bonnet, 1959: 4946; Platnick, 2005.



Figs. 275–278: Zelotes radiatus Lawrence, 1928. 275 Palp, ventral view; 276 Palp, retrolateral view; 277 Epigynum, ventral view; 278 Epigynum, dorsal view. Scale line=0.2 mm.

Zelotes solitarius: Roewer, 1955: 466; Bonnet, 1959: 4952; Platnick, 2005.

Remarks: The type of *Z. solitarius* from Kuke Pan, Botswana (Lawrence, 1936) deposited in the Transvaal Museum, South Africa could not be located. However, a female specimen from Kabulabula, Namibia had the original type label and it is possible that the wrong locality was published by Lawrence (1936). The illustration (Lawrence, 1936: fig. 2) is clearly that of *Z. radiatus*, thus *Z. solitarius* is considered a junior synonym of *Z. radiatus*.

Diagnosis: The raised end of the terminal apophysis, recessed embolar base with visible retrolateral extension, and long thin embolus of the male palpus (Figs. 275–276), and the form of the female epigynal plate (Fig. 277), clearly distinguish *Z. radiatus* from other *Zelotes* species. Colour: dark brown throughout.

Male: Total length 6.33. Carapace 3.00 long, 2.14 wide. Femur II length 1.67. Eye sizes and interdistances: AME 0.09, ALE 0.12, PME 0.12, PLE 0.10; AME-AME 0.05, AME-ALE 0.01, PME-PME 0.04, PME-PLE 0.04, AME-PME 0.10, ALE-PLE 0.03. Palp (Figs. 275–276): EMB long, thin, EB recessed, with prolateral process visible beyond TA. Leg spination: Ti III r1-1-1; Mt I & II v2-2-0.

Female: Total length 8.33. Carapace 2.83 long, 2.08 wide. Femur II length 1.67. Eye sizes and interdistances: AME 0.10, ALE 0.12, PME 0.15, PLE 0.10; AME-AME 0.05, AME-ALE 0.02, PME-PME 0.05, PME-PLE 0.04, AME-PME 0.10, ALE-PLE 0.05. Epigynum (Figs. 277–278): MED longitudinal, wide, PEM considerably extended posteriorly. Leg spination: Fe IV r0-0-1, p0-0-1; Mt II v2-2-0.

Material examined: BOTSWANA: Maphaneng Pan, Maun, 24 February 1976, 29, A. Russell-Smith, BMNH. NAMIBIA:

Andara-Okavango River, 1979, M. E. Baddeley, 19, MRAC 152.860; Kabulabula, Eastern Caprivi, 12 July 1930, FitzSimons, 19 (holotype of *solitarius*?), TM 5944; Kowares, January–February 1926, museum staff, 19, SAMC B7099; Sesfontein, February 1925, museum staff, 19 (holotype of *radiatus*), SAMC B6675. SOUTH AFRICA: Pafuri, 13 January 1996, A. Leroy, 19, PPRI 2003/161. ZIMBABWE: Chishakwe Ranch Safari Camp, 3–7 December 1998, Girls College & museum staff, 23 69, NMBZ A13367; Forestry Camp, Kasungula, 6 December 1993, Girls College & museum staff, 19, NMBZ A11127; Mzola Camp, 5–9 December 1997, Girls College & museum staff, 19, NMBZ A13778.

Distribution: Northern Namibia, Northern Province, South Africa, Botswana and Zimbabwe (Map 22).

Natural history: This species is associated with riparian vegetation.

Zelotes reduncus (Purcell, 1907) (Figs. 279–282, Map 22)

Melanophora redunca Purcell, 1907: 329, pl. 15, fig. 50 (DQ).

Zelotes redunca: Tucker, 1923: 371.

Zelotes anchora Tucker, 1923: 354–355, fig. 66 (D^Q); Giltay 1935: 16; Roewer, 1955: 462; Bonnet, 1959: 4912; Platnick, 2005. **Syn. n.**

Zelotes reduncus: Giltay, 1935: 17; Roewer, 1955: 465; Bonnet, 1959: 4947; Platnick, 2005.

Remarks: This is a very distinctive species, with the heavily sclerotised female epigynum identical in *Z. reduncus* and *Z. anchora*, thus *Z. anchora* is considered a junior synonym of *Z. reduncus*. Both Roewer (1955) and Platnick (2005) cited an incorrect page number (378) for the original description of *Z. anchora*.

Diagnosis: *Zelotes reduncus* is easily identified by the short, broad, prolaterally originating embolus of the male palp (Figs. 279–280), and the curved, heavily sclerotised posterior epigynal margin and simple structure of the epigynal ducts of the female (Figs. 281–282). Colour: brown/black throughout.

Male: Total length 6.04. Carapace 2.92 long, 2.04 wide. Femur II length 1.63. Eye sizes and interdistances: AME 0.08, ALE 0.08, PME 0.10, PLE 0.10; AME-AME 0.03, AME-ALE 0.01, PME-PME 0.08, PME-PLE 0.05, AME-PME 0.08, ALE-PLE 0.05. Palp (Figs. 279–280): EMB short, broad, originating prolaterally, EB broad, TA square. Leg spination: Ti III r1-1-1; Mt I & II v2-2-0.

Female: Total length 5.61. Carapace 2.41 long, 1.97 wide. Femur II length 1.33. Eye sizes and interdistances: AME 0.10, ALE 0.10, PME 0.10, PLE 0.10; AME-AME 0.02, AME-ALE 0.02, PME-PME 0.05, PME-PLE 0.03, AME-PME 0.06, ALE-PLE 0.04. Epigynum (Figs. 281–282): PEM curved and heavily sclerotised. Leg spination: Mt II v2-2-0, III r1-2-2.

Material examined: SOUTH AFRICA: Bergvleit: 2 June 1915, W. F. Purcell, 1[°], SAMC B1190; July 1905, 1[°], SAMC B2352; Brandvlei, August 1900, W. F. Purcell, 1[°], SAMC 7826; Cape Town, September 1899, Mrs Purcell, 1[°], SAMC 6085; nr Ceres, November 1917, R. W. Tucker, 1[°], SAMC B3473; Florisbad, March 1983, museum staff, 2[°], BMSA 429; Golden Gate, 19 March 1986, museum staff, 1[°], BMSA 1506; Gt. Winterberg Mts., 29 November 1916, R. W. Tucker, 1[°] (holotype of *anchora*), SAMC B2701; Hout Bay: October 1916, R. W. Tucker, 1[°], SAMC B2622; July 1990, H. A. Spencer, 1[°], BMNH; Kalk Bay, March 1898, R. Lightfoot, 1[°], SAMC 3137; in Mts beyond Montagu, November 1919, R. W. Tucker, 1[°], SAMC B4741; Muizenberg, 7–21 April 1991, R. Legg, 3[°], MRAC 173.623; Naval Hill, March 1991, L. Lotz, 1[°], BMSA 7526; Princess



Figs. 279–282: Zelotes reduncus (Purcell, 1907). **279** Palp, ventral view; **280** Palp, retrolateral view; **281** Epigynum, ventral view; **282** Epigynum, dorsal view. Scale line=0.1 mm.



Figs. 283–284: Zelotes rugege sp. n. 283 Palp, ventral view; 284 Palp, retrolateral view. Scale line=0.2 mm.

Vlei, May 1901, J. Williamson, 19, SAMC 9127; Queenstown, E. T. Wells, 19, BMNH 07.2.3.1–8; Salt River, April 1896, W. F. Purcell, 39 (syntypes of *reduncus*), SAMC 3394; Strand, 12 August 1978, F. Wanless, 19, PPRI 88/229; nr Swellendam, August 1900, W. F. Purcell, 19, SAMC 7922; Touws River, September 1896, W. F. Purcell, 19, SAMC 3970; Vragkop, 12 January–2 February 1902, S. Schreiner, 13, SAMC 13885; Zeekoevlei, September 1886, 13, SAMC 8619.

Distribution: Known only from South Africa (Map 22).

Zelotes rugege sp. n. (Figs. 283-284, Map 23)

Type: Male holotype from Rugege Forest, Rwanda, March 1951 (M. Lejeune), deposited in MRAC (092.531).

Etymology: The specific name is a noun in apposition taken from the type locality.

Diagnosis: Zelotes rugege can be distinguished by the squared terminal apophysis and the prolaterally originating broad embolus which narrows and wraps around the cymbium (Figs. 283–284). Colour: carapace and legs light brown, abdomen grey.

Male: Total length 5.13. Carapace 2.42 long, 1.92 wide. Femur II length 1.58. Eye sizes and interdistances: AME 0.10, ALE 0.10, PME 0.10, PLE 0.10; AME-AME 0.03, AME-ALE 0.01, PME-PME 0.04, PME-PLE 0.03, AME-PME 0.10, ALE-PLE 0.04. Palp (Figs. 283–284): EMB long, initially broad, wraps around cymbium, TA truncated. Leg spination: Pa IV r0-1-0; Ti I & II v2-2-0; Mt I & II v2-2-0.

Female: Unknown.

Other material examined: DEMOCRATIC REPUBLIC OF CONGO: Butembo: February–March 1975, M. Lejeune, 13, MRAC 161.370; 13, MRAC 161.436; Kasumbira Forest, December 1974– January 1975, M. Lejeune, 13, MRAC 68.147; Masisi, June 1959, M. Lejeune, 13, MRAC 113.980; Mt. Lubwe, 13 April 1971, M. Lejeune, 13, MRAC 138.938.

Distribution: Known only from the Democratic Republic of Congo and Rwanda (Map 23).



Map 22: Distribution of Zelotes radiatus \bullet , Z. reduncus \blacksquare , Z. sclateri \blacktriangle and Z. songus \bigcirc in southern Africa.

Zelotes rungwensis sp. n. (Figs. 285-286, Map 23)

Type: Female holotype from Mt. Rungwe, Tanzania, 20 August 1980 (M. Stoltze & N. Scharff), deposited in ZMUC.

Etymology: The specific name refers to the type locality.

Diagnosis: Zelotes rungwensis can be distinguished by the straight lateral margins of the epigynal plate, and the shape of the ducts (Figs. 285–286). Colour: carapace and legs light brown, abdomen grey.

Female: Total length 7.00. Carapace 2.67 long, 2.00 wide. Femur II length 1.67. Eye sizes and interdistances: AME 0.09, ALE 0.12, PME 0.10, PLE 0.11; AME-AME 0.05, AME-ALE 0.01, PME-PME 0.05, PME-PLE 0.04, AME-PME 0.10, ALE-PLE 0.05. Epigynum (Figs. 285–286): LEM straight, MED transverse, connected medially. Leg spination: Fe IV r0-0-1, p0-0-1.

Male: Unknown.

Material examined: Only the holotype.

Distribution: Known only from the type locality (Map 23).



Figs. 285–286: Zelotes rungwensis sp. n. 285 Epigynum, ventral view; 286 Epigynum, dorsal view. Scale line=0.2 mm.

Zelotes sclateri Tucker, 1923 (Figs. 287–290, Map 22)

- Zelotes sclateri Tucker, 1923: 373–374, pl. 10, fig. 77 (D\$); Giltay, 1935: 18; Roewer, 1955: 465; Bonnet, 1959: 4949; Platnick, 2005.
- Zelotes vryburgensis Tucker, 1923: 377, pl. 11, fig. 80 (D\$); Giltay, 1935: 18; Roewer, 1955: 466; Bonnet, 1959: 4959; Van den Berg & Dippenaar-Schoeman, 1991: 248; Platnick, 2005. Syn. n.

Remarks: The female holotypes of *Z. sclateri* and *Z. vryburgensis* are identical and *Z. sclateri* has page priority.

Diagnosis: *Zelotes sclateri* can be distinguished by the long coiled embolus of the male palp (Figs. 287–288) and the structure and form of the female epigynal plate (Fig. 289). Colour: black throughout.

Male: Total length 7.08. Carapace 3.33 long, 2.50 wide. Femur II length 2.08. Eye sizes and interdistances: AME 0.10, ALE 0.12, PME 0.12, PLE 0.10; AME-AME 0.05, AME-ALE 0.02, PME-PME 0.05, PME-PLE 0.05, AME-PME 0.05, ALE-PLE 0.03. Palp (Figs. 287–288): EMB long, coiled, with subdistal prong, EB visible beyond TA. Leg spination: Ti III r2-1-1, p2-1-1, IV p2-1-1, r2-1-1; Mt I v2-1-0, II v2-1-0.



Figs. 287–290: Zelotes sclateri Tucker, 1923. 287 Palp, ventral view; 288 Palp, retrolateral view; 289 Epigynum, ventral view; 290 Epigynum, dorsal view. Scale line=0.2 mm.



Map 23: Distribution of Zelotes rugege ●, Z. rungwensis ▲, Z. shabae ¬, Z. singroboensis ⊿, Z. swelus ○ and Z. vikela ■ in Africa.

Female: Total length 8.05. Carapace 3.19 long, 2.42 wide. Femur II length 1.81. Eye sizes and interdistances: AME 0.10, ALE 0.12, PME 0.10, PLE 0.10; AME-AME 0.03, AME-ALE 0.02, PME-PME 0.05, PME-PLE 0.05, AME-PME 0.10, ALE-PLE 0.07. Epigynum (Figs. 289–290): MED convoluted, with irregular enlargements anteriorly, LEM close to AEM, PEM rounded. Leg spination: Pa III p0-1-0; Ti III p2-1-1, IV r2-1-1; Mt I v2-1-0, II v2-1-0.

Material examined: LESOTHO: Koro-koro, 1905, W. L. Sclater, 19 (holotype of sclateri), SAMC 14425; Maseru, G. Vannier, 19, MRAC 122.911. SOUTH AFRICA: Deelhoek, 20 March 1999, C. Haddad, 3ð 29, NMBZ A14374; Douglas, 29 May 2001, C. Haddad, 19, NMBZ A14394; Florisbad: September 1982, L. Lotz, 19, BMSA 241; May 1983, 58 29, BMSA 449; June 1983, 29, BMSA 461; July 1983, 49, BMSA 485; September 1983, 19, BMSA 507; April 1984, 48 19, BMSA 557; May 1984, 29, BMSA 572; June 1984, 13 29, BMSA 588; December 1984, 13, BMSA 735; April 1985, 123 19, ex BMSA 719; June 1985, 19, BMSA 863; July 1985, 19, BMSA 1929; August 1985, 19, BMSA 995; 19, BMSA 1000; 16-30 March 1988, 18, BMSA 4287; 1ð, BMSA 4284; 1ð, BMSA 4279; 1ð, BMSA 4247; 1ð, ex BMSA 4258; 30 March-26 June 1988, 29, BMSA 4314; 28, ex BMSA 4314; 23, BMSA 4326; 13, BMSA 4293; 26 April-10 May 1988, 19, BMSA 4368; 19, BMSA 4364; 10-24 May 1988, 19, BMSA 4387; 19, BMSA 4405; 29, BMSA 4397; 24 May-8 June 1988, 19, BMSA 4463; 19, BMSA 4440; 19, BMSA 4460; 19, ex BMSA 4450; 18, BMSA 4439; 8-21 June 1988, 19, BMSA 4501; 19, BMSA 4489; 21 June-5 July 1988, 19, BMSA 4555; 19, BMSA 4529; 5-20 July 1988, 19, BMSA 4623; 19, BMSA 4581; 19, ex BMSA 4996; 20 July-4 August 1988, 19, BMSA 4640; Grant's Hill: May 1991, L. Lotz, 19, BMSA 6803; 29, BMSA 6797; April 1991, 18, BMSA 7596; 68, BMSA 7595; Groblersdal, 1 June 1978, D. Uys, 18, PPRI 86/210; Hartebeestpan 330, April-August 1987, museum staff, 3d, BMSA 2071; Hopefield, 11 May 2001, C. Haddad, 19, NMBZ A14383; Johannesburg: 6 April 1976, F. Wanless, 29, PPRI 88/230; 8 April 1976, 19, PPRI 88/215; 4 September 1976, 13, PPRI 88/214; Kloofendal: 25 April 1987, A. Leroy, 19, PPRI 91/533; 19, PPRI 91/518; 10 April 1988, 13, PPRI 91/516; Koppiesrus, 8 March 2001, C. Haddad, 18, NMBZ A14387; Langberg 138, March-June 1988, museum staff, 13, BMSA 2934; Mogwase, Pilansberg Nature Reserve: 15 March 2001, R. Yarnell, 1ð 19, PPRI 2003/1380; 28, PPRI 2003/1379; 18, PPRI 2003/1381; 18,

PPRI 2003/1382; 2d, PPRI 2003/1383; 1d, PPRI 2003/1398; 19, PPRI 2003/1399; Naval Hill: May 1990, L. Lotz, 38 29, BMSA 6409; June 1990, 19, BMSA 6463; March 1991, 28, ex BMSA 7548; 48, BMSA 7547; April 1991, 23 19, BMSA 7569; 33, BMSA 7582; 23, BMSA 7577; 1d, ex BMSA 7563; June–July 1991, 29, BMSA 6753; September 1991, 19, BMSA 7802; Pretoria, 22 March 1987, J. M. Mulders, 13, PPRI 90/381; Rietondale Research Station: 5 May 1986, A. van der Berg, 1&, PPRI 86/51; 1&, PPRI 86/54; 7 May 1986, 1&, PPRI 86/70; 12 May 1986, 28, PPRI 86/69; 19 May 1986, 19, PPRI 86/80; 21 May 1986, 1d, PPRI 86/132; 26 May 1986, 19, PPRI 86/90; 2 June 1986, 19, PPRI 86/86; 19, PPRI 89/1082; 4 June 1987, 29, PPRI 87/749; 18 June 1987, 19, PPRI 89/1046; 14 September 1987, 19, PPRI 87/948; 24 May 1988, 13 29, PPRI 89/502; 7 June 1988, 19, PPRI 88/454; 9 July 1987, C. Anderson, 19, PPRI 87/809; 16 July 1987, 19, PPRI 87/815; 13 August 1987, 19, PPRI 88/14;13 July 1989, 19, PPRI 89/674; March 1990, 48 19, PPRI 90/452; 24 April 1988, A. Briggs, 28 59, PPRI 88/298; 10 May 1988, 19, PPRI 88/443; 11 June 1987, 29, PPRI 87/755; 18 July 1988, 59, PPRI 89/136; 26 July 1988, 89, PPRI 88/680; 2 August 1988, 59, PPRI 88/684; 6 September 1988, 29, PPRI 89/144; 17 May 1988, C. Barnard, 95 219, PPRI 88/475; 19, PPRI 88/440; 24 May 1988, 149, PPRI, 88/476; 7 June 1988, 203 209, PPRI 88/461; 13 June 1988, 13 79, PPRI 88/546; 21 June 1988, 29, PPRI 88/682; 2 August 1988, 29, PPRI 88/695; 16 August 1988, 49, PPRI 88/725; 18 August 1988,19, PPRI 88/747; 29 August 1988, 13 29, PPRI 88/814; Tuinplaas: 10 May 2001, M. van Jaarsveld, 33, PPRI 2003/27; 13, PPRI 2003/63; 13, PPRI 2003/317; 13, PPRI 2003/205; 19, PPRI 2003/440; 19, PPRI 2003/526; 19, PPRI 2003/529; 19, PPRI 2003/685; 13, PPRI 2003/725; 21 May 2001, 13 19, PPRI 2003/534; 24 May 2001, 13 19, PPRI 2003/206; 19, PPRI 2003/207; 19, PPRI 2003/524; 19, PPRI 2003/528; 30 May 2001, 19, PPRI 2003/209; 19, PPRI 2003/530; 18 July 2001, 29, PPRI 2003/531; 19, PPRI 2003/533; 18 August 2001, 19, PPRI 2003/441; 7 May 2002, 18, PPRI 2003/273; 19, PPRI 2003/208; 19, PPRI 2003/409; 19, PPRI 2003/527; 2ð, PPRI 2003/648; 13, PPRI 2003/796; 5 June 2002, 13, PPRI 2003/439; 11 June 2002, 19, PPRI 2003/525; 19, PPRI 2003/532; Tussen-die-Riviere: 23 March 2001, C. Haddad, 13, NMBZ A14390; 19, NMBZ A14391; 29, NMBZ A14392; Vryburg, April 1917, J. S. Broom, 19 (holotype of vryburgensis), SAMC B3326; Wolfkop, February-April 1990, S. du Toit, 93 39, BMSA 5604.

Distribution: South Africa and Lesotho (Map 22). *Natural history*: Peak adult activity recorded in April– May.



Figs. 291–292: Zelotes shabae sp. n. **291** Palp, ventral view; **292** Palp, retrolateral view. Scale line=0.2 mm.

Zelotes shabae sp. n. (Figs. 291-292, Map 23)

Type: Male holotype from Luiswishi, Shaba Province, Democratic Republic of Congo, February–March 1974 (F. Malaise), deposited in MRAC (149.203).

Etymology: The specific name refers to the type locality.

Diagnosis: Zelotes shabae can be distinguished by the long prolateral prong on the embolar base and the winged structure on the median apophysis of the male palp (Figs. 291–292). Colour: dark brown throughout.

Male: Total length 6.66. Carapace 2.67 long, 2.00 wide. Femur II length 1.67. Eye sizes and interdistances: AME 0.10, ALE 0.11, PME 0.11, PLE 0.10; AME-AME 0.05, AME-ALE 0.01, PME-PME 0.05, PME-PLE 0.02, AME-PME 0.10, ALE-PLE 0.06. Palp (Figs. 291–292): EMB thin, EB with long prolateral process, MA with winged structure, tip of TA pointed. Leg spination: Fe IV r0-0-1, p0-0-1; Mt II v2-2-0.

Female: Unknown.

Material examined: Only the holotype.

Distribution: Known only from the type locality (Map 23).

Zelotes singroboensis Jézéquel, 1965 (Figs. 293–296, Map 23)

Zelotes singroboensis Jézéquel, 1965: 300–301, figs. 9–10 (Dσ²); Brignoli, 1983: 580; Platnick, 2005.

Diagnosis: Males of *Zelotes singroboensis* can be distinguished by the elongated cymbium, and extremely long recurved embolus (Figs. 293–294), and females by the convoluted median ducts with longitudinal enlargements (Fig. 296). Colour: dark brown to black throughout. *Male*: Total length 7.92. Carapace 3.75 long, 2.75 wide. Femur II length 2.50. Eye sizes and interdistances: AME 0.10, ALE 0.12, PME 0.12, PLE 0.10; AME-AME 0.06, AME-ALE 0.01, PME-PME 0.07, PME-PLE 0.05, AME-PME 0.12, ALE-PLE 0.08. Palp (Figs. 293–294): EMB extremely long and recurved, EB with pro- and retrolateral processes, cymbium elongated to accommodate long EMB. Leg spination: Mt I v2-2-0.

Female: Total length 7.08. Carapace 3.33 long, 2.50 wide. Femur II length 2.08. Eye sizes and interdistances: AME 0.12, ALE 0.10, PME 0.12, PLE 0.10; AME-AME 0.06, AME-ALE 0.01, PME-PME 0.07, PME-PLE 0.04, AME-PME 0.08, ALE-PLE 0.05. Epigynum (Figs. 295–296): MED long and convoluted, with longitudinal enlargements, PEM curved, PED stalked. Leg spination: Mt II v2-2-0.

Material examined: KENYA: Chyulu Hills, 29 July–4 August 1986, D. Sellen, 13, NMKE. IVORY COAST: Lamto, 1963–1964, J.-F. Jézéquel, 153 3º (syntypes), MNHN; 33, MNHN. TANZANIA: Mkomazi, Umba River, 18 April 1985, A. Russell-Smith, 13, AMNH.

Distribution: Tropical Africa (Map 23).

Zelotes songus sp. n. (Figs. 297–298, Map 22)

Type: Female holotype from Tuinplaas, South Africa, 29 January 2003 (M. van Jaarsveld), deposited in PPRI (2003/1318).



Figs. 293–296: Zelotes singroboensis Jézéquel, 1965. 293 Palp, ventral view; 294 Palp, retrolateral view; 295 Epigynum, ventral view; 296 Epigynum, dorsal view. Scale line=0.3 mm.



Figs. 297–298: Zelotes songus sp. n. 297 Epigynum, ventral view; 298 Epigynum, dorsal view. Scale line=0.2 mm.

Etymology: The specific name is an adjective derived from the Ndebele "songa" meaning coiled, referring to the epigynal ducts.

Diagnosis: Zelotes songus can be distinguished by the anterior margins of the epigynal plate which extend posteriorly to form a median plate, and by the highly coiled ducts (Figs. 297–298). Colour: light brown throughout, except abdomen brown-grey.

Female: Total length 5.33. Carapace 2.50 long, 1.75 wide. Femur II length 1.50. Eye sizes and interdistances: AME 0.10, ALE 0.09, PME 0.10, PLE 0.09; AME-AME 0.03, AME-ALE 0.03, PME-PME 0.05, PME-PLE 0.05, AME-PME 0.06, ALE-PLE 0.03. Epigynum (Figs. 297–298): Anterior margins extended posteriorly to form a "V"-shaped median plate, ducts highly coiled. Leg spination: Pa IV r0-1-0, v0-1-0; Ti II v0-1-1, III r0-1-1; Mt I v0-0-0.

Male: Unknown.

Material examined: Only the holotype.

Distribution: Known only from the type locality (Map 22).

Zelotes swelus sp. n. (Figs. 299-300, Map 23)

Types: Male holotype from Luiswishi Forest, Lubumbashi, Democratic Republic of Congo, November 1986 (F. Malaise), deposited in MRAC (168.677). Paratype: 1*d*, same locality, March 1987 (F. Malaise), MRAC 167.913.

Etymology: The specific name is an adjective derived from the Ndebele word meaning short, referring to the embolus.

Diagnosis: Zelotes swelus can be distinguished by the long, broad prolateral prong on the embolar base and the short, broad embolus (Figs. 299–300). Colour: light brown throughout, except abdomen grey.

Male: Total length 3.75. Carapace 2.08 long, 1.33 wide. Femur II length 0.92. Eye sizes and interdistances: AME 0.10, ALE 0.10, PME 0.14, PLE 0.10; AME-AME 0.03, AME-ALE 0.01, PME-PME 0.02, PME-PLE 0.02, AME-PME 0.10, ALE-PLE 0.05. Palp (Figs. 299–300): EMB short and broad, EB with long, broad prolateral process. Leg spination: typical for genus.

Female: Unknown.

Material examined: Only the types.

Distribution: Known only from the type locality (Map 23).



Figs. 299–300: Zelotes swelus sp. n. **299** Palp, ventral view; **300** Palp, retrolateral view. Scale line=0.2 mm.

Zelotes vikela sp. n. (Figs. 301-302, Map 23)

Type: Male holotype from 5–10 km S of Richard Toll, Senegal, August 1989 (J. Everts), deposited in MRAC (172.098).

Etymology: The specific name is a noun in apposition derived from the Ndebele word for protection, referring to the sheath-like extension on the male EB.

Diagnosis: *Zelotes vikela* can be distinguished by the long embolus, proximally enlarged and distally thin, procurved and ensheathed by the embolar base (Figs. 301–302). Colour: dark brown throughout.

Male: Total length 6.25. Carapace 2.92 long, 2.17 wide. Femur II length 2.00. Eye sizes and interdistances: AME 0.12, ALE 0.12, PME 0.15, PLE 0.12; AME-AME 0.05, AME-ALE 0.01, PME-PME 0.01, PME-PLE 0.05, AME-PME 0.09, ALE-PLE 0.05. Palp (Figs. 301–302):



Figs. 301–302: Zelotes vikela sp. n. **301** Palp, ventral view; **302** Palp, retrolateral view. Scale line=0.2 mm.

EMB proximally thickened, distally thin, procurved and ensheathed by EB, MA large. Leg spination: Pa IV r0-1-0; Ti II v0-1-0, III p2-1-1, v1-1-1; Mt I & II v2-2-0, III r2-1-2, p1-2-2, IV r2-2-2.

Female: Unknown.

Material examined: Only the holotype.

Distribution: Known only from the type locality (Map 23).

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Gazetteer

Algeria

Biskra Oasis	34°50′N, 05°50′E			
Angola				
Capolo	10°22′S, 14°07′E			
Quipungo	14°36′S, 14°37′E			
Botswana				
Bonke	20°04′S, 22°55′E			
Boro River	19°45′S, 23°40′E			
Jere Jere Lagoon	19°35′S, 23°35′E			
Kang	23°41′S, 22°50′E			
Khakhea	24°51′S, 23°20′E			
Kwando River	18°27′S, 23°32′E			
Lake Ngami	20°30′S, 22°45′E			
Manxunyane	19°54′S, 23°28′E			
Maphaneng Pan, Maun	19°54′S, 23°25′E			
Matlamanyane	19°33′S, 25°55′E			
Maxwee	19°30′S, 23°40′E			
Nxai Pan Nat. Park	19°52′S, 24°40′E			
Shorobe	19°45′S, 23°40′E			
Thamalakane River, Maun	19°59′S, 23°30′E			
Burkina Faso				
Kouba	13°34′N, 02°30′W			
North Yatenga, Ouahigouya	13°35′N, 02°25′W			
Ouagadougou	12°22′N, 01°31′W			
Sissamba	13°30′N, 02°28′W			
Soulou	13°36′N, 02°28′W			
Burundi				
Mugera	03°04′S, 30°40′E			
Ruzizi Plain	03°21′S, 29°17′E			
Cameroon				
Ebolowa	03°00′N, 10°53′E			
Hossere Vokre	08°21′N, 13°15′E			
Mt. Cameroon	05°00′N, 09°50′E			
Cape Verde Islands				
Boa Vista	16°30'N, 23°00'W			
Bravo	14°45′N, 24°45′W			
Sal	17°15′N, 23°00′W			
S. Nicolau	17°15′N, 24°20′W			

Central African Republic			
	Bambari	04°15′N,	21°54′E
	Bozoum	06°19′N,	16°23′E
Chad			
	Bebedjia	08°41′N,	16°34′E
	Massif du Tibesti	21°30′N,	17°30′E
Demo	cratic Republic of Congo		
	Banana	06°00′S,	12°24′E
	Butembo	00°09′N,	29°17′E
	Gombe-Matadi	05°49′S,	13°28′E
	Itanda Forest	$00^{\circ}10^{\circ}S,$ $03^{\circ}25'S$	29°13 E 20°08'E
	Kahuzi Summit	$03^{\circ}25^{\circ}3,$ $02^{\circ}15'S$	29 08 E 28°41'E
	Kasumbira Forest	00°01′S	20°18′E
	Katanga	10° 59′ S.	26°44′E
	Kilindera Camp	00°23′N,	29°55′E
	Kivu	00°48′S,	29°18′E
	Lubondai	06°34′S,	22°39′E
	Lubumbashi	11°40′S,	27°28′E
	Luiswishi	11°31′S,	27°27′E
	Lulimbi	00°32′S,	29°40′E
	Masako	00°35′N,	25°11′E
	Masisi	01°15′S,	29°00′E
	Mt. Lubwe	$00^{\circ}02' \text{ N},$	29°18'E
	Mpala Puindi Plain	$00^{\circ}45^{\circ}S$, $00^{\circ}48^{\prime}S$	29°31 E 20°18'E
	Rutshuru	$00 \ 40 \ S,$ $01^{\circ}11'S$	29 10 E 29°27'E
	Uvira	$03^{\circ}20'S$	29°05′E
	Visiki Forest	00°12′N.	29°15′E
Favnt		,	
Leypu	Alexandria	31°00′N	29°50′E
	Bardiyah	31°50′N,	25°00′E
Ethio	pia	,	
Lino	Addis Ababa	09°05′N.	38°50′E
	Awash Falls	09°00′N.	40°10′E
	Bole Stream Gorge	08°52′N,	38°44′E
	Dira Dawa	09°40′N,	41°59′E
	El Dere	05°08′N,	43°08′E
	Elolo	06°20′N,	36°15′E
	Ghinda	15°26′N,	39°05′E
	Mata-Hara	08°54′N,	39°55′E
	Mt. Salale	09°44′N,	38°37′E
	Sagan River	04°28′N,	36°04′E
	Simien Mits.	$13^{\circ}15^{\circ}N$, $04^{\circ}54'N$	38°13 E 28°05/E
c ·	n'abeno	04 J4 IN,	38 03 E
Guine	a-Bissau Die Cossine	11000/11	14057/11
T	Coast	11 00 IN,	14 <i>37</i> W
Ivory	Coast	07042/NI	05°20/W
	Bouaké	07°40'N	05°00′W
	Bouitha	07°22′N	06°28′W
	Kossou	06°57′N.	04°58′W
	Lamto	07°26′N,	05°37′W
	Mabi Forest, Bettié	06°05′N,	03°30′W
	Marahoué Ranch	08°04′N,	$06^{\circ}12'W$
	N. Korhogo Bandama River	09°27′N,	$05^{\circ}38'W$
	Pakodji	06°59′N,	05°38′W
	Titekro	06°52′N,	06°20′W
Kenya	l i i i i i i i i i i i i i i i i i i i		
	Baringo	00°35′N,	36°15′E
	Cherangani	01°05′N,	35°20′E
	Chyulu Hills	02°50′S,	38°00'E
	Galana Kiver	03°10′S,	39°30'E
	Isido	$00^{\circ}20^{\circ}S,$	40°00°E
	Kaibos	00 20 IN, 01°15' N	37 33 E 35°10'F
	Kamatira	01°15′N	35°10′E
	Kijabé	00°55′S.	36° 30' E
	Kilifi	03°35′S,	39°50′E
	Kitale	01°12′N,	35°08′E
	Kongelai	01°30′N,	35°00′E
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	Kwaisagat	01°15′N,	35°15′E
	Lake Harrington	00°15′N,	36°05′E
	Magadi	01°54′S,	36°19′E
	Mt. Kenya	00°05′S,	37°20′E
	Mt. Suswa	01°09′S,	36°22′E
	Mtembur	01°20′N,	35°05′E
	Nairobi	01°15′S,	36°50′E
	Naivasha	00°45′S,	36°20′E
	Namanga	02°33′S,	36°47′E
	Ruiru	01°10′S,	37°00′E
	Sebit	01°25′N,	35°25′E
	Tinderet Forest	00°03′S,	35°28′E
	Watamu	03°23′S,	40°00′E
Lesot	ho		
	Koro-koro	29°33′S,	27°37′E
	Maseru	29°00′S,	27°56′E
Libva			
	Kufra Oasis	24°30′N.	23°00′E
Mada		,	
Iviaua	Mainaa	15940/8	46925/10
	Majunga	15-40-5,	40°23 E
Mala	wi		
	Chilemba Hill	16°00′S,	35°30′E
	Chintheche	11°50′S,	33°13′E
	Lichenya Plateau	16°00′S,	35°30′E
	Mt. Mulanje	16°00′S,	35°30′E
	Nkwazi Forest	14°05′S,	34°55′E
	Thuchila	16°00′S,	35°30′E
Mali			
	Goundam	16°30′N,	04°30′W
	Sevare	14°30′N,	04°00′W
Moro	000		
	Oulmès	33°17′N.	06°00′W
	o united		00 00 11
Nomi	hia		
Nami	bia Andara Okavango	18004/5	21 ° 20' F
Nami	bia Andara-Okavango Andani	18°04′S,	21°29′E
Nami	bia Andara-Okavango Andoni Bloubokdraai	18°04′S, 18°30′S, 18°50′S	21°29′E 16°45′E 16°57′E
Nami	bia Andara-Okavango Andoni Bloubokdraai Roganfah Diamond Araa	18°04′S, 18°30′S, 18°50′S, 27°27′S	21°29'E 16°45'E 16°57'E 15°22'E
Nami	bia Andara-Okavango Andoni Bloubokdraai Bogenfeb Diamond Area	18°04′S, 18°30′S, 18°50′S, 27°27′S, 21°10′S	21°29′E 16°45′E 16°57′E 15°23′E
Nami	bia Andara-Okavango Andoni Bloubokdraai Bogenfeb Diamond Area Brandberg Puffalo Paso	18°04′S, 18°30′S, 18°50′S, 27°27′S, 21°10′S, 18°08′S	21°29'E 16°45'E 16°57'E 15°23'E 14°33'E 21°41'E
Nami	bia Andara-Okavango Andoni Bloubokdraai Bogenfeb Diamond Area Brandberg Buffalo Base Bulls Poorte	18°04′S, 18°30′S, 18°50′S, 27°27′S, 21°10′S, 18°08′S, 24°29′S	21°29'E 16°45'E 16°57'E 15°23'E 14°33'E 21°41'E 16°15'E
Nami	bia Andara-Okavango Andoni Bloubokdraai Bogenfeb Diamond Area Brandberg Buffalo Base Bulls Poorte Chamaic (Ludaritz)	18°04'S, 18°30'S, 18°50'S, 27°27'S, 21°10'S, 18°08'S, 24°29'S, 27°56'S	21°29'E 16°45'E 16°57'E 15°23'E 14°33'E 21°41'E 16°15'E 15°40/E
Nami	bia Andara-Okavango Andoni Bloubokdraai Bogenfeb Diamond Area Brandberg Buffalo Base Bulls Poorte Chamais (Luderitz) Descifentain 87	18°04'S, 18°30'S, 18°50'S, 27°27'S, 21°10'S, 18°08'S, 24°29'S, 27°56'S, 27°56'S,	21°29′E 16°45′E 16°57′E 15°23′E 14°33′E 21°41′E 16°15′E 15°40′E
Nami	bia Andara-Okavango Andoni Bloubokdraai Bogenfeb Diamond Area Brandberg Buffalo Base Bulls Poorte Chamais (Luderitz) Dassiefontein 87 Dome Corea	18°04'S, 18°30'S, 18°50'S, 27°27'S, 21°10'S, 18°08'S, 24°29'S, 27°56'S, 27°56'S, 27°13'S,	21°29′E 16°45′E 16°57′E 15°23′E 14°33′E 21°41′E 16°15′E 15°40′E 18°35′E
Nami	bia Andara-Okavango Andoni Bloubokdraai Bogenfeb Diamond Area Brandberg Buffalo Base Bulls Poorte Chamais (Luderitz) Dassiefontein 87 Dome Gorge	18°04'S, 18°30'S, 18°50'S, 27°27'S, 21°10'S, 18°08'S, 24°29'S, 27°56'S, 27°13'S, 22°28'S,	21°29′E 16°45′E 16°57′E 15°23′E 14°33′E 21°41′E 16°15′E 15°40′E 18°35′E 15°04′E
Nami	bia Andara-Okavango Andoni Bloubokdraai Bogenfeb Diamond Area Brandberg Buffalo Base Bulls Poorte Chamais (Luderitz) Dassiefontein 87 Dome Gorge Dorstland	18°04'S, 18°30'S, 18°50'S, 27°27'S, 21°10'S, 18°08'S, 24°29'S, 27°56'S, 27°56'S, 27°13'S, 22°28'S, 18°46'S,	21°29′E 16°45′E 16°57′E 15°23′E 14°33′E 21°41′E 16°15′E 15°40′E 18°35′E 15°04′E 14°44′E
Nami	bia Andara-Okavango Andoni Bloubokdraai Bogenfeb Diamond Area Brandberg Buffalo Base Bulls Poorte Chamais (Luderitz) Dassiefontein 87 Dome Gorge Dorstland Duikersdrink Eiseb Biuge	18°04'S, 18°30'S, 18°50'S, 27°27'S, 21°10'S, 18°08'S, 24°29'S, 27°56'S, 27°56'S, 27°13'S, 22°28'S, 18°46'S, 19°04'S,	21°29'E 16°45'E 16°57'E 15°23'E 14°33'E 21°41'E 16°15'E 15°40'E 18°35'E 15°04'E 14°44'E 14°44'E 14°43'E 20°00'E
Nami	bia Andara-Okavango Andoni Bloubokdraai Bogenfeb Diamond Area Brandberg Buffalo Base Bulls Poorte Chamais (Luderitz) Dassiefontein 87 Dome Gorge Dorstland Duikersdrink Eiseb River	18°04'S, 18°30'S, 18°50'S, 27°27'S, 21°10'S, 18°08'S, 24°29'S, 27°56'S, 27°56'S, 27°13'S, 22°28'S, 18°46'S, 19°04'S, 20°40'S,	21°29′E 16°45′E 16°57′E 15°23′E 14°33′E 21°41′E 16°15′E 15°40′E 18°35′E 15°04′E 14°44′E 14°44′E 14°43′E 20°09′E
Nami	bia Andara-Okavango Andoni Bloubokdraai Bogenfeb Diamond Area Brandberg Buffalo Base Bulls Poorte Chamais (Luderitz) Dassiefontein 87 Dome Gorge Dorstland Duikersdrink Eiseb River Gobabeb	18°04'S, 18°30'S, 18°50'S, 27°27'S, 21°10'S, 18°08'S, 24°29'S, 27°56'S, 27°56'S, 27°56'S, 22°28'S, 18°46'S, 19°04'S, 20°40'S, 23°33'S,	21°29′E 16°45′E 16°57′E 15°23′E 14°33′E 21°41′E 16°15′E 15°40′E 18°35′E 15°04′E 14°44′E 14°44′E 14°43′E 20°09′E
Nami	bia Andara-Okavango Andoni Bloubokdraai Bogenfeb Diamond Area Brandberg Buffalo Base Bulls Poorte Chamais (Luderitz) Dassiefontein 87 Dome Gorge Dorstland Duikersdrink Eiseb River Gobabeb Helio	18°04'S, 18°30'S, 18°50'S, 27°27'S, 21°10'S, 18°08'S, 24°29'S, 27°56'S, 27°56'S, 27°13'S, 22°28'S, 18°46'S, 19°04'S, 20°40'S, 23°33'S, 19°03'S,	21°29′E 16°45′E 16°57′E 15°23′E 14°33′E 21°41′E 16°15′E 15°40′E 18°35′E 15°04′E 14°44′E 14°44′E 14°43′E 20°09′E 15°02′E 16°29′E 240°8′/E
Nami	bia Andara-Okavango Andoni Bloubokdraai Bogenfeb Diamond Area Brandberg Buffalo Base Bulls Poorte Chamais (Luderitz) Dassiefontein 87 Dome Gorge Dorstland Duikersdrink Eiseb River Gobabeb Helio Kabulabula	18°04'S, 18°30'S, 18°50'S, 27°27'S, 21°10'S, 18°08'S, 24°29'S, 27°56'S, 27°56'S, 27°13'S, 22°28'S, 18°46'S, 19°04'S, 20°40'S, 23°33'S, 19°03'S, 17°50'S,	21°29'E 16°45'E 16°57'E 15°23'E 14°33'E 21°41'E 16°15'E 15°40'E 18°35'E 15°04'E 14°44'E 14°44'E 14°44'E 14°44'E 14°43'E 20°09'E 15°02'E 16°29'E 24°58'E
Nami	bia Andara-Okavango Andoni Bloubokdraai Bogenfeb Diamond Area Brandberg Buffalo Base Bulls Poorte Chamais (Luderitz) Dassiefontein 87 Dome Gorge Dorstland Duikersdrink Eiseb River Gobabeb Helio Kabulabula Kamaseb	18°04'S, 18°30'S, 18°50'S, 27°27'S, 21°10'S, 18°08'S, 24°29'S, 27°56'S, 27°56'S, 27°13'S, 22°28'S, 18°46'S, 19°04'S, 20°40'S, 23°33'S, 19°03'S, 17°50'S, 19°04'S,	21°29'E 16°45'E 16°57'E 15°23'E 14°33'E 21°41'E 16°15'E 15°40'E 18°35'E 15°04'E 14°44'E 14°44'E 14°44'E 14°44'E 15°02'E 15°02'E 16°29'E 24°58'E 10°16'E
Nami	bia Andara-Okavango Andoni Bloubokdraai Bogenfeb Diamond Area Brandberg Buffalo Base Bulls Poorte Chamais (Luderitz) Dassiefontein 87 Dome Gorge Dorstland Duikersdrink Eiseb River Gobabeb Helio Kabulabula Kamaseb Kaokoland	18°04'S, 18°30'S, 18°50'S, 27°27'S, 21°10'S, 18°08'S, 24°29'S, 27°56'S, 27°13'S, 22°28'S, 18°46'S, 19°04'S, 20°40'S, 20°40'S, 19°03'S, 17°50'S, 19°04'S, 20°45'S, 20°45'S, 20°55'	21°29'E 16°45'E 16°57'E 15°23'E 14°33'E 21°41'E 16°15'E 15°40'E 18°35'E 15°04'E 14°44'E 14°44'E 14°44'E 14°44'E 14°44'E 15°02'E 15°02'E 16°29'E 24°58'E 16°41'E 12°10'E
Nami	bia Andara-Okavango Andoni Bloubokdraai Bogenfeb Diamond Area Brandberg Buffalo Base Bulls Poorte Chamais (Luderitz) Dassiefontein 87 Dome Gorge Dorstland Duikersdrink Eiseb River Gobabeb Helio Kabulabula Kamaseb Kaokoland Khabus 146	18°04'S, 18°30'S, 18°50'S, 27°27'S, 21°10'S, 18°08'S, 24°29'S, 27°56'S, 27°13'S, 22°28'S, 18°46'S, 19°04'S, 20°40'S, 19°03'S, 17°50'S, 19°04'S, 10°04'S, 10°04'S, 10°15'S, 26°18'S, 10°25'	21°29'E 16°45'E 16°57'E 15°23'E 14°33'E 21°41'E 16°15'E 15°40'E 18°35'E 15°04'E 14°44'E 14°44'E 14°44'E 14°44'E 14°44'E 14°44'E 15°02'E 16°29'E 24°58'E 16°41'E 12°10'E 18°13'E
Nami	bia Andara-Okavango Andoni Bloubokdraai Bogenfeb Diamond Area Brandberg Buffalo Base Bulls Poorte Chamais (Luderitz) Dassiefontein 87 Dome Gorge Dorstland Duikersdrink Eiseb River Gobabeb Helio Kabulabula Kamaseb Kaokoland Khabus 146 Kowares	18°04'S, 18°30'S, 18°50'S, 27°27'S, 21°10'S, 18°08'S, 24°29'S, 27°56'S, 27°13'S, 22°28'S, 18°46'S, 19°04'S, 20°40'S, 19°03'S, 17°50'S, 19°04'S, 19°04'S, 17°15'S, 26°18'S, 19°29'S, 20°29'S,	21°29'E 16°45'E 16°57'E 15°23'E 14°33'E 21°41'E 16°15'E 15°40'E 18°35'E 15°04'E 14°44'E 14°44'E 14°44'E 14°44'E 14°44'E 14°44'E 14°44'E 16°29'E 24°58'E 16°41'E 12°10'E 18°13'E 14°29'E
Nami	bia Andara-Okavango Andoni Bloubokdraai Bogenfeb Diamond Area Brandberg Buffalo Base Bulls Poorte Chamais (Luderitz) Dassiefontein 87 Dome Gorge Dorstland Duikersdrink Eiseb River Gobabeb Helio Kabulabula Kamaseb Kaokoland Khabus 146 Kowares Lower Ostrich Gorge	18°04'S, 18°30'S, 18°50'S, 27°27'S, 21°10'S, 18°08'S, 24°29'S, 27°56'S, 27°13'S, 22°28'S, 18°46'S, 19°04'S, 20°40'S, 20°40'S, 19°03'S, 17°50'S, 19°04'S, 19°04'S, 20°44'S, 20°44'S, 20°45', 20°45', 20°45', 20°29'S, 20°20'S,	21°29'E 16°45'E 16°57'E 15°23'E 14°33'E 21°41'E 16°15'E 15°40'E 18°35'E 15°04'E 14°44'E 14°44'E 14°44'E 14°43'E 20°09'E 15°02'E 16°29'E 24°58'E 16°41'E 12°10'E 18°13'E 14°29'E 14°29'E 14°58'E
Nami	bia Andara-Okavango Andoni Bloubokdraai Bogenfeb Diamond Area Brandberg Buffalo Base Bulls Poorte Chamais (Luderitz) Dassiefontein 87 Dome Gorge Dorstland Duikersdrink Eiseb River Gobabeb Helio Kabulabula Kamaseb Kaokoland Khabus 146 Kowares Lower Ostrich Gorge	18°04'S, 18°30'S, 18°50'S, 27°27'S, 21°10'S, 18°08'S, 24°29'S, 27°56'S, 27°56'S, 27°13'S, 22°28'S, 18°46'S, 19°04'S, 20°40'S, 20°40'S, 19°03'S, 17°50'S, 19°04'S, 19°04'S, 19°04'S, 20°41'S, 19°04'S, 19°04'S, 19°04'S, 19°04'S, 10°05'S, 10°05'S, 10°05'S, 10°05'S, 10°05'S, 10°05'S, 10°05'S, 10°05'S, 10°05'S, 10°05'S, 10°05'S, 10°05'S, 10°05'S, 10°05'S, 10°05'S, 10°05'S, 10°05'S, 10°05'S, 10°5'	$21 \circ 29' E$ $16 \circ 45' E$ $16 \circ 57' E$ $15 \circ 23' E$ $14 \circ 33' E$ $21 \circ 41' E$ $16 \circ 15' E$ $15 \circ 40' E$ $18 \circ 35' E$ $15 \circ 04' E$ $14 \circ 44' E$ $14 \circ 44' E$ $14 \circ 43' E$ $20 \circ 09' E$ $15 \circ 02' E$ $16 \circ 29' E$ $24 \circ 58' E$ $16 \circ 41' E$ $12 \circ 10' E$ $18 \circ 13' E$ $14 \circ 29' E$ $14 \circ 58' E$ $15 \circ 40' E$
Nami	bia Andara-Okavango Andoni Bloubokdraai Bogenfeb Diamond Area Brandberg Buffalo Base Bulls Poorte Chamais (Luderitz) Dassiefontein 87 Dome Gorge Dorstland Duikersdrink Eiseb River Gobabeb Helio Kabulabula Kamaseb Kaokoland Khabus 146 Kowares Lower Ostrich Gorge Lüderitz Mafi	18°04'S, 18°30'S, 18°50'S, 27°27'S, 21°10'S, 18°08'S, 24°29'S, 27°56'S, 27°56'S, 27°13'S, 22°28'S, 18°46'S, 19°04'S, 20°40'S, 23°33'S, 19°03'S, 17°50'S, 19°04'S, 20°40'S, 22°30'S, 22°30'S, 27°56'S, 19°35'S,	$21 \circ 29' E$ $16 \circ 45' E$ $16 \circ 57' E$ $15 \circ 23' E$ $14 \circ 33' E$ $21 \circ 41' E$ $16 \circ 15' E$ $15 \circ 40' E$ $18 \circ 35' E$ $15 \circ 04' E$ $14 \circ 44' E$ $14 \circ 44' E$ $14 \circ 43' E$ $20 \circ 09' E$ $15 \circ 02' E$ $16 \circ 29' E$ $24 \circ 58' E$ $16 \circ 41' E$ $12 \circ 10' E$ $18 \circ 13' E$ $14 \circ 29' E$ $14 \circ 58' E$ $15 \circ 40' E$ $17 \circ 20' E$ $17 \circ 20' E$
Nami	bia Andara-Okavango Andoni Bloubokdraai Bogenfeb Diamond Area Brandberg Buffalo Base Bulls Poorte Chamais (Luderitz) Dassiefontein 87 Dome Gorge Dorstland Duikersdrink Eiseb River Gobabeb Helio Kabulabula Kamaseb Kaokoland Khabus 146 Kowares Lower Ostrich Gorge Lüderitz Mafi Mahanene Agriculture Res. Stn	18°04'S, 18°30'S, 18°50'S, 27°27'S, 21°10'S, 18°08'S, 24°29'S, 27°56'S, 27°56'S, 27°13'S, 22°28'S, 18°46'S, 19°04'S, 20°40'S, 20°40'S, 19°03'S, 17°50'S, 19°04'S, 19°04'S, 19°04'S, 19°04'S, 19°04'S, 19°04'S, 19°04'S, 19°04'S, 19°04'S, 19°04'S, 19°04'S, 10°50'	$21^{\circ}29' E$ $16^{\circ}45' E$ $16^{\circ}57' E$ $15^{\circ}23' E$ $14^{\circ}33' E$ $21^{\circ}41' E$ $16^{\circ}15' E$ $15^{\circ}40' E$ $18^{\circ}35' E$ $15^{\circ}04' E$ $14^{\circ}44' E$ $14^{\circ}44' E$ $14^{\circ}44' E$ $14^{\circ}43' E$ $20^{\circ}09' E$ $15^{\circ}02' E$ $16^{\circ}29' E$ $24^{\circ}58' E$ $16^{\circ}41' E$ $12^{\circ}10' E$ $18^{\circ}13' E$ $14^{\circ}29' E$ $14^{\circ}58' E$ $15^{\circ}40' E$ $17^{\circ}20' E$ $14^{\circ}47' E$
Nami	bia Andara-Okavango Andoni Bloubokdraai Bogenfeb Diamond Area Brandberg Buffalo Base Bulls Poorte Chamais (Luderitz) Dassiefontein 87 Dome Gorge Dorstland Duikersdrink Eiseb River Gobabeb Helio Kabulabula Kamaseb Kaokoland Khabus 146 Kowares Lower Ostrich Gorge Lüderitz Mafi Mahanene Agriculture Res. Stn Naukluft Nature Reserve	18°04'S, 18°30'S, 18°50'S, 27°27'S, 21°10'S, 18°08'S, 24°29'S, 27°56'S, 27°13'S, 22°28'S, 18°46'S, 19°04'S, 20°40'S, 20°40'S, 19°03'S, 17°50'S, 19°04'S, 19°04'S, 19°04'S, 19°04'S, 19°04'S, 19°04'S, 19°04'S, 19°04'S, 19°05'S, 19°29'S, 22°30'S, 19°35'S, 17°26'S, 24°10'S, 24°10'S, 24°29'S, 22°30'S, 10°20'S, 21°10'S, 10°50'S, 10°20'S, 10°50'S, 10°20'S, 10°20'S, 10°50'	$21 \circ 29' E$ $16 \circ 45' E$ $16 \circ 57' E$ $15 \circ 23' E$ $14 \circ 33' E$ $21 \circ 41' E$ $16 \circ 15' E$ $15 \circ 40' E$ $18 \circ 35' E$ $15 \circ 04' E$ $14 \circ 44' E$ $14 \circ 44' E$ $14 \circ 43' E$ $20 \circ 09' E$ $15 \circ 02' E$ $16 \circ 29' E$ $24 \circ 58' E$ $16 \circ 41' E$ $12 \circ 10' E$ $18 \circ 13' E$ $14 \circ 29' E$ $14 \circ 58' E$ $15 \circ 40' E$
Nami	bia Andara-Okavango Andoni Bloubokdraai Bogenfeb Diamond Area Brandberg Buffalo Base Bulls Poorte Chamais (Luderitz) Dassiefontein 87 Dome Gorge Dorstland Duikersdrink Eiseb River Gobabeb Helio Kabulabula Kamaseb Kaokoland Khabus 146 Kowares Lower Ostrich Gorge Lüderitz Mafi Mahanene Agriculture Res. Stn Naukluft Nature Reserve Nomptsas	18°04'S, 18°30'S, 18°50'S, 27°27'S, 21°10'S, 18°08'S, 24°29'S, 27°56'S, 27°56'S, 27°13'S, 22°28'S, 18°46'S, 19°04'S, 20°40'S, 20°40'S, 19°03'S, 17°50'S, 19°04'S, 19°04'S, 19°04'S, 19°04'S, 19°04'S, 19°05'S, 19°29'S, 22°30'S, 27°56'S, 19°35'S, 17°26'S, 24°10'S, 24°20'S, 22°30'S, 10°20'	$21 \circ 29' E$ $16 \circ 45' E$ $16 \circ 57' E$ $15 \circ 23' E$ $14 \circ 33' E$ $21 \circ 41' E$ $16 \circ 15' E$ $15 \circ 40' E$ $18 \circ 35' E$ $15 \circ 04' E$ $14 \circ 44' E$ $14 \circ 44' E$ $14 \circ 43' E$ $20 \circ 09' E$ $15 \circ 02' E$ $16 \circ 29' E$ $24 \circ 58' E$ $16 \circ 41' E$ $12 \circ 10' E$ $18 \circ 13' E$ $14 \circ 29' E$ $14 \circ 58' E$ $15 \circ 40' E$ $17 \circ 20' E$ $14 \circ 47' E$ $16 \circ 10' E$ $16 \circ 10' E$ $16 \circ 20' F$
Nami	bia Andara-Okavango Andoni Bloubokdraai Bogenfeb Diamond Area Brandberg Buffalo Base Bulls Poorte Chamais (Luderitz) Dassiefontein 87 Dome Gorge Dorstland Duikersdrink Eiseb River Gobabeb Helio Kabulabula Kamaseb Kaokoland Khabus 146 Kowares Lower Ostrich Gorge Lüderitz Mafi Mahanene Agriculture Res. Stn Naukluft Nature Reserve Nomptsas Okokatuwo	18°04'S, 18°30'S, 18°50'S, 27°27'S, 21°10'S, 18°08'S, 24°29'S, 27°56'S, 27°56'S, 27°13'S, 22°28'S, 18°46'S, 19°04'S, 20°40'S, 20°40'S, 20°40'S, 19°03'S, 17°50'S, 19°04'S, 19°04'S, 19°04'S, 19°04'S, 19°04'S, 19°05'S, 19°05'S, 19°29'S, 22°30'S, 19°35'S, 17°26'S, 24°10'S, 24°28'S, 17°27'S, 10°27'	$21 \circ 29' E$ $16 \circ 45' E$ $16 \circ 57' E$ $15 \circ 23' E$ $14 \circ 33' E$ $21 \circ 41' E$ $16 \circ 15' E$ $15 \circ 40' E$ $18 \circ 35' E$ $15 \circ 04' E$ $14 \circ 44' E$ $14 \circ 44' E$ $14 \circ 43' E$ $20 \circ 09' E$ $15 \circ 02' E$ $16 \circ 29' E$ $24 \circ 58' E$ $16 \circ 41' E$ $12 \circ 10' E$ $18 \circ 13' E$ $14 \circ 29' E$ $14 \circ 58' E$ $15 \circ 40' E$ $17 \circ 20' E$ $14 \circ 47' E$ $16 \circ 46' E$ $12 \circ 27 = 10' E$ $16 \circ 46' E$ $12 \circ 27 = 10' E$ $16 \circ 27 = 10' E$ $16 \circ 40' E$ $17 \circ 20' E$ $14 \circ 47' E$ $16 \circ 46' E$ $12 \circ 27 = 10' E$ $16 \circ 46' E$ $12 \circ 32' E$ $16 \circ 45' E$ $16 \circ 45'$
Nami	bia Andara-Okavango Andoni Bloubokdraai Bogenfeb Diamond Area Brandberg Buffalo Base Bulls Poorte Chamais (Luderitz) Dassiefontein 87 Dome Gorge Dorstland Duikersdrink Eiseb River Gobabeb Helio Kabulabula Kamaseb Kaokoland Khabus 146 Kowares Lower Ostrich Gorge Lüderitz Mafi Mahanene Agriculture Res. Stn Naukluft Nature Reserve Nomptsas Okokatuwo Ombika	18°04'S, 18°30'S, 18°50'S, 27°27'S, 21°10'S, 18°08'S, 24°29'S, 27°56'S, 27°56'S, 27°13'S, 22°28'S, 18°46'S, 19°04'S, 20°40'S, 20°40'S, 20°40'S, 19°03'S, 17°50'S, 19°04'S, 19°04'S, 19°04'S, 19°04'S, 19°04'S, 19°05'S, 19°29'S, 22°30'S, 22°30'S, 19°35'S, 17°26'S, 24°10'S, 24°28'S, 17°27'S, 19°27'S, 19°27'S, 19°27'S, 10°27'	$21 \circ 29' E$ $16 \circ 45' E$ $16 \circ 57' E$ $15 \circ 23' E$ $14 \circ 33' E$ $21 \circ 41' E$ $16 \circ 15' E$ $15 \circ 40' E$ $18 \circ 35' E$ $15 \circ 04' E$ $14 \circ 44' E$ $14 \circ 43' E$ $20 \circ 09' E$ $15 \circ 02' E$ $16 \circ 29' E$ $24 \circ 58' E$ $16 \circ 41' E$ $12 \circ 10' E$ $18 \circ 13' E$ $14 \circ 29' E$ $14 \circ 58' E$ $15 \circ 40' E$ $17 \circ 20' E$ $14 \circ 47' E$ $16 \circ 10' E$ $16 \circ 46' E$ $12 \circ 32' E$ $15 \circ 52' E$
Nami	bia Andara-Okavango Andoni Bloubokdraai Bogenfeb Diamond Area Brandberg Buffalo Base Bulls Poorte Chamais (Luderitz) Dassiefontein 87 Dome Gorge Dorstland Duikersdrink Eiseb River Gobabeb Helio Kabulabula Kamaseb Kaokoland Khabus 146 Kowares Lower Ostrich Gorge Lüderitz Mafi Mahanene Agriculture Res. Stn Naukluft Nature Reserve Nomptsas Okokatuwo Ombika Omega, 19 km E	18°04'S, 18°30'S, 18°50'S, 27°27'S, 21°10'S, 18°08'S, 24°29'S, 27°56'S, 27°56'S, 27°13'S, 22°28'S, 18°46'S, 19°04'S, 20°40'S, 20°40'S, 20°40'S, 19°03'S, 17°50'S, 19°04'S, 10°50'S, 19°04'S, 10°50'S, 10°29'S, 22°30'S, 27°56'S, 10°29'S, 22°30'S, 17°26'S, 24°10'S, 24°28'S, 17°27'S, 19°17'S, 18°01'S, 10°15'S	$21 \circ 29' E$ $16 \circ 45' E$ $16 \circ 57' E$ $15 \circ 23' E$ $14 \circ 33' E$ $21 \circ 41' E$ $16 \circ 15' E$ $15 \circ 40' E$ $18 \circ 35' E$ $15 \circ 04' E$ $14 \circ 44' E$ $14 \circ 44' E$ $14 \circ 43' E$ $20 \circ 09' E$ $15 \circ 02' E$ $16 \circ 29' E$ $24 \circ 58' E$ $16 \circ 41' E$ $12 \circ 10' E$ $18 \circ 13' E$ $14 \circ 29' E$ $14 \circ 58' E$ $15 \circ 40' E$ $17 \circ 20' E$ $14 \circ 47' E$ $16 \circ 10' E$ $16 \circ 46' E$ $12 \circ 32' E$ $15 \circ 52' E$ $22 \circ 26' E$
Nami	bia Andara-Okavango Andoni Bloubokdraai Bogenfeb Diamond Area Brandberg Buffalo Base Bulls Poorte Chamais (Luderitz) Dassiefontein 87 Dome Gorge Dorstland Duikersdrink Eiseb River Gobabeb Helio Kabulabula Kamaseb Kaokoland Khabus 146 Kowares Lower Ostrich Gorge Lüderitz Mafi Mahanene Agriculture Res. Stn Naukluft Nature Reserve Nomptsas Okokatuwo Ombika Omega, 19 km E Ondundozonananduna Mt.	18°04'S, 18°30'S, 18°50'S, 27°27'S, 21°10'S, 18°08'S, 24°29'S, 27°56'S, 27°56'S, 27°13'S, 22°28'S, 18°46'S, 19°04'S, 20°40'S, 20°40'S, 20°40'S, 19°03'S, 17°50'S, 19°04'S, 10°50'S, 19°04'S, 10°29'S, 22°30'S, 27°56'S, 19°35'S, 17°26'S, 24°10'S, 24°29'S, 22°30'S, 17°26'S, 10°27'S, 10°27'S, 10°27'S, 10°27'S, 10°27'S, 10°15'S, 10°15'S, 10°27'S, 10°15'S, 10°15'S, 10°5755'S, 10°5755'S, 10°5755'S, 10°5755'S, 10°2755'S, 10°2755'S, 10°2755'S, 10°2755'S, 10°2755'S, 10°2755'S, 10°2755'S, 10°2755'S, 10°5755'S, 10°57	$21 \circ 29' E$ $16 \circ 45' E$ $16 \circ 57' E$ $15 \circ 23' E$ $14 \circ 33' E$ $21 \circ 41' E$ $16 \circ 15' E$ $15 \circ 40' E$ $18 \circ 35' E$ $15 \circ 04' E$ $14 \circ 44' E$ $14 \circ 44' E$ $14 \circ 43' E$ $20 \circ 09' E$ $15 \circ 02' E$ $16 \circ 29' E$ $24 \circ 58' E$ $16 \circ 41' E$ $12 \circ 10' E$ $18 \circ 13' E$ $14 \circ 29' E$ $14 \circ 58' E$ $15 \circ 40' E$ $17 \circ 20' E$ $14 \circ 47' E$ $16 \circ 10' E$ $16 \circ 46' E$ $12 \circ 32' E$ $15 \circ 52' E$ $22 \circ 26' E$ $15 \circ 53' E$
Nami	bia Andara-Okavango Andoni Bloubokdraai Bogenfeb Diamond Area Brandberg Buffalo Base Bulls Poorte Chamais (Luderitz) Dassiefontein 87 Dome Gorge Dorstland Duikersdrink Eiseb River Gobabeb Helio Kabulabula Kamaseb Kaokoland Khabus 146 Kowares Lower Ostrich Gorge Lüderitz Mafi Mahanene Agriculture Res. Stn Naukluft Nature Reserve Nomptsas Okokatuwo Ombika Omega, 19 km E Ondundozonananduna Mt. Ongandjera	18°04'S, 18°30'S, 18°50'S, 27°27'S, 21°10'S, 18°08'S, 24°29'S, 27°56'S, 27°56'S, 27°13'S, 22°28'S, 18°46'S, 19°04'S, 20°40'S, 20°40'S, 20°40'S, 19°03'S, 17°50'S, 19°04'S, 10°29'S, 22°30'S, 27°56'S, 19°29'S, 22°30'S, 17°26'S, 24°10'S, 24°28'S, 17°26'S, 24°21'S, 10°27'S, 10°27'S, 10°15'S, 10°57'	$21 \circ 29' E$ $16 \circ 45' E$ $16 \circ 57' E$ $15 \circ 23' E$ $14 \circ 33' E$ $21 \circ 41' E$ $16 \circ 15' E$ $15 \circ 40' E$ $18 \circ 35' E$ $15 \circ 04' E$ $14 \circ 44' E$ $14 \circ 44' E$ $14 \circ 43' E$ $20 \circ 09' E$ $15 \circ 02' E$ $16 \circ 29' E$ $24 \circ 58' E$ $16 \circ 41' E$ $12 \circ 10' E$ $18 \circ 13' E$ $14 \circ 29' E$ $14 \circ 58' E$ $15 \circ 40' E$ $17 \circ 20' E$ $14 \circ 47' E$ $16 \circ 10' E$ $16 \circ 46' E$ $12 \circ 32' E$ $15 \circ 52' E$ $22 \circ 26' E$ $15 \circ 43' E$ $15 \circ 43' E$
Nami	bia Andara-Okavango Andoni Bloubokdraai Bogenfeb Diamond Area Brandberg Buffalo Base Bulls Poorte Chamais (Luderitz) Dassiefontein 87 Dome Gorge Dorstland Duikersdrink Eiseb River Gobabeb Helio Kabulabula Kamaseb Kaokoland Khabus 146 Kowares Lower Ostrich Gorge Lüderitz Mafi Mahanene Agriculture Res. Stn Naukluft Nature Reserve Nomptsas Okokatuwo Ombika Omega, 19 km E Ondundozonananduna Mt. Ongava	18°04'S, 18°30'S, 18°50'S, 27°27'S, 21°10'S, 18°08'S, 24°29'S, 27°56'S, 27°56'S, 27°13'S, 22°28'S, 18°46'S, 19°04'S, 20°40'S, 20°40'S, 20°40'S, 19°03'S, 17°50'S, 19°04'S, 10°20'S, 22°30'S, 27°56'S, 19°29'S, 22°30'S, 17°26'S, 24°10'S, 24°28'S, 17°26'S, 24°10'S, 24°28'S, 17°27'S, 19°17'S, 18°01'S, 19°57'S, 19°20'S, 10°20'	$21 \circ 29' E$ $16 \circ 45' E$ $16 \circ 57' E$ $15 \circ 23' E$ $14 \circ 33' E$ $21 \circ 41' E$ $16 \circ 15' E$ $15 \circ 40' E$ $18 \circ 35' E$ $15 \circ 04' E$ $14 \circ 44' E$ $14 \circ 44' E$ $14 \circ 43' E$ $20 \circ 09' E$ $15 \circ 02' E$ $16 \circ 29' E$ $24 \circ 58' E$ $16 \circ 41' E$ $12 \circ 10' E$ $18 \circ 13' E$ $14 \circ 29' E$ $14 \circ 58' E$ $15 \circ 40' E$ $17 \circ 20' E$ $14 \circ 47' E$ $16 \circ 10' E$ $16 \circ 46' E$ $12 \circ 32' E$ $15 \circ 52' E$ $22 \circ 26' E$ $15 \circ 43' E$ $15 \circ 54' E$ $15 \circ 54' E$
Nami	bia Andara-Okavango Andoni Bloubokdraai Bogenfeb Diamond Area Brandberg Buffalo Base Bulls Poorte Chamais (Luderitz) Dassiefontein 87 Dome Gorge Dorstland Duikersdrink Eiseb River Gobabeb Helio Kabulabula Kamaseb Kaokoland Khabus 146 Kowares Lower Ostrich Gorge Lüderitz Mafi Mahanene Agriculture Res. Stn Naukluft Nature Reserve Nomptsas Okokatuwo Ombika Omega, 19 km E Ondundozonananduna Mt. Ongandjera Ongava Otavi	18°04'S, 18°30'S, 18°50'S, 27°27'S, 21°10'S, 18°08'S, 24°29'S, 27°56'S, 27°56'S, 27°13'S, 22°28'S, 18°46'S, 19°04'S, 20°40'S, 20°40'S, 20°40'S, 10°05'S, 10°05'S, 10°05'S, 10°29'S, 22°30'S, 22°30'S, 27°56'S, 10°26'S, 24°10'S, 24°28'S, 17°27'S, 10°15'S, 10°15'S, 10°57'S, 10°20'	$21^{\circ}29' E$ $16^{\circ}45' E$ $16^{\circ}57' E$ $15^{\circ}23' E$ $14^{\circ}33' E$ $21^{\circ}41' E$ $16^{\circ}15' E$ $15^{\circ}40' E$ $18^{\circ}35' E$ $15^{\circ}04' E$ $14^{\circ}44' E$ $14^{\circ}43' E$ $20^{\circ}09' E$ $15^{\circ}02' E$ $16^{\circ}29' E$ $24^{\circ}58' E$ $16^{\circ}41' E$ $12^{\circ}10' E$ $18^{\circ}13' E$ $14^{\circ}29' E$ $14^{\circ}58' E$ $15^{\circ}40' E$ $17^{\circ}20' E$ $14^{\circ}47' E$ $16^{\circ}46' E$ $12^{\circ}32' E$ $15^{\circ}52' E$ $22^{\circ}26' E$ $15^{\circ}43' E$ $15^{\circ}54' E$ $17^{\circ}20' E$
Nami	bia Andara-Okavango Andoni Bloubokdraai Bogenfeb Diamond Area Brandberg Buffalo Base Bulls Poorte Chamais (Luderitz) Dassiefontein 87 Dome Gorge Dorstland Duikersdrink Eiseb River Gobabeb Helio Kabulabula Kamaseb Kaokoland Khabus 146 Kowares Lower Ostrich Gorge Lüderitz Mafi Mahanene Agriculture Res. Stn Naukluft Nature Reserve Nomptsas Okokatuwo Ombika Omega, 19 km E Ondundozonananduna Mt. Ongandjera Ongava Otavi	18°04'S, 18°30'S, 18°50'S, 27°27'S, 21°10'S, 18°08'S, 24°29'S, 27°56'S, 27°56'S, 27°13'S, 22°28'S, 18°46'S, 19°04'S, 20°40'S, 20°40'S, 20°40'S, 10°05'S, 10°05'S, 10°04'S, 10°05'S, 10°29'S, 22°30'S, 22°30'S, 27°56'S, 10°29'S, 22°30'S, 10°26'S, 24°10'S, 24°20'S, 10°27'S, 10°15'S, 10°15'S, 10°15'S, 10°57'S, 10°20'S, 10°20'S, 10°20'S, 10°20'S, 10°20'S, 10°15'S, 10°57'S, 10°20'	$21^{\circ}29' E$ $16^{\circ}45' E$ $16^{\circ}57' E$ $15^{\circ}23' E$ $14^{\circ}33' E$ $21^{\circ}41' E$ $16^{\circ}15' E$ $15^{\circ}40' E$ $18^{\circ}35' E$ $15^{\circ}04' E$ $14^{\circ}44' E$ $14^{\circ}43' E$ $20^{\circ}09' E$ $15^{\circ}02' E$ $16^{\circ}29' E$ $24^{\circ}58' E$ $16^{\circ}41' E$ $12^{\circ}10' E$ $18^{\circ}13' E$ $14^{\circ}29' E$ $14^{\circ}58' E$ $15^{\circ}40' E$ $17^{\circ}20' E$ $14^{\circ}47' E$ $16^{\circ}46' E$ $12^{\circ}32' E$ $15^{\circ}52' E$ $22^{\circ}26' E$ $15^{\circ}43' E$ $15^{\circ}54' E$ $17^{\circ}20' E$ $15^{\circ}54' E$ $17^{\circ}20' E$ $16^{\circ}49' E$ $15^{\circ}54' E$ $17^{\circ}20' E$ $16^{\circ}49' E$ $16^{$
Nami	bia Andara-Okavango Andoni Bloubokdraai Bogenfeb Diamond Area Brandberg Buffalo Base Bulls Poorte Chamais (Luderitz) Dassiefontein 87 Dome Gorge Dorstland Duikersdrink Eiseb River Gobabeb Helio Kabulabula Kamaseb Kaokoland Khabus 146 Kowares Lower Ostrich Gorge Lüderitz Mafi Mahanene Agriculture Res. Stn Naukluft Nature Reserve Nomptsas Okokatuwo Ombika Omega, 19 km E Ondundozonananduna Mt. Ongandjera Ongava Otavi Otjiku 192	18°04'S, 18°30'S, 18°50'S, 27°27'S, 21°10'S, 18°08'S, 24°29'S, 27°56'S, 27°56'S, 27°13'S, 22°28'S, 18°46'S, 19°04'S, 20°40'S, 20°40'S, 20°40'S, 10°05'S, 10°05'S, 10°05'S, 10°05'S, 10°25'S, 10°26'S, 24°20'S, 10°27'S, 10°27'S, 10°15'S, 10°27'S, 10°15'S, 10°15'S, 10°15'S, 10°57'S, 10°20'	21°29'E 16°45'E 16°57'E 15°23'E 14°33'E 21°41'E 16°15'E 15°40'E 18°35'E 15°04'E 14°44'E 14°44'E 14°44'E 14°44'E 14°43'E 20°09'E 15°02'E 16°29'E 24°58'E 16°41'E 12°10'E 18°13'E 14°29'E 14°29'E 14°29'E 14°58'E 15°40'E 17°20'E 16°46'E 12°32'E 15°52'E 22°26'E 15°43'E 15°54'E 17°20'E 15°54'E 17°20'E 16°49'E 18°36'E 15°57'E 15°54'E 17°20'E 16°49'E 18°36'E 15°57'E 15°57'E 15°57'E 15°54'E 15°54'E 15°56'E

	Penguin Island	26°00′S.	14°30′E
	Possession Island	27°29′S	15°02′E
	Richthofen	$22^{\circ}34'S$	17°45′E
	Rossing Mine	22°28′S	15°02′E
	RTZ Gorge	22°20'5, 28°40'S	17°49'E
	Sesfontein	10°00′S	13°40'E
	Sidwa	19 09 S,	13 40 E
	Slowa	17.30 S,	23°23 E
	Skeleton Coast Park	18°14′S,	12°01′E
	Skorpion Mine	27°49′S,	16°36′E
	Swakopmund	22°33′S,	14°35′E
	Tsumeb	19°44′S,	17°44′E
	Windhoek	22°38′S,	17°05′E
Niger			
	Mt. Tarrouadji	17°15′N,	08°33′E
	Niamey	13°40′ N.	02°06′E
	Téour. Air	18°00′N.	08°30′E
Nigor	io	10 00 14,	00 20 2
INIgel	Ibadan	07°25'N	04°00'E
	Ibadan	07 23 IN,	04 00 E
	lte	$0/^{\circ} 30' N$,	04°30'E
	Kabba	08°00′N,	06°00′E
	Lagos	06°26′N,	03°30′E
	Obudu Plateau	06°38′N,	09°05′E
	Oguja Lake	06°40′N,	08°50′E
	Warri	05°40′N,	05°45′E
Rwar	da		
	Akagera National Park	01°40′S	30°35′F
	Rutare	$01^{\circ}36'S$	20°44'E
	Citarama	$02^{\circ}21/S$	29 44 E
		02 21 3,	29 45 E
	Lake Ihema	01°55′S,	30°45'E
	Lake Mohasi	02°36′S,	29°44′E
	Rugege Forest	$02^{\circ}30'$ S,	29°15′E
Saudi	i Arabia		
	Juriad Is.	27°11′N,	49°57′E
Seneg	zal		
~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	Cape Vert	14°30′N	17°30′W
	Dakar	14°40′ N	$17^{\circ}30'W$
	Dakar Bichard Toll 5–10 km S	14°40′N, 16°20′N	17°30′W
<b>61</b>	Dakar Richard Toll, 5–10 km S	14°40′N, 16°20′N,	17°30′W 15°3′0′W
Sierra	Dakar Richard Toll, 5–10 km S <b>a Leone</b>	14°40′N, 16°20′N,	17°30′W 15°3′0′W
Sierra	Dakar Richard Toll, 5–10 km S <b>a Leone</b> Makeni	14°40′N, 16°20′N, 08°50′N,	17°30'W 15°3'0'W 12°15'W
Sierra	Dakar Richard Toll, 5–10 km S <b>a Leone</b> Makeni <b>lia</b>	14°40′N, 16°20′N, 08°50′N,	17°30′W 15°3′0′W 12°15′W
Sierra	Dakar Richard Toll, 5–10 km S <b>a Leone</b> Makeni <b>lia</b> Sar Uanle	14°40′N, 16°20′N, 08°50′N, 02°40′N,	17°30′W 15°3′0′W 12°15′W 44°50′E
Sierr: Soma South	Dakar Richard Toll, 5–10 km S <b>a Leone</b> Makeni <b>lia</b> Sar Uanle <b>A Africa</b>	14°40′N, 16°20′N, 08°50′N, 02°40′N,	17°30′W 15°3′0′W 12°15′W 44°50′E
Sierra Soma South	Dakar Richard Toll, 5–10 km S <b>a Leone</b> Makeni <b>lia</b> Sar Uanle <b>A frica</b> Acornhoek	14°40'N, 16°20'N, 08°50'N, 02°40'N, 24°32'S,	17°30'W 15°3'0'W 12°15'W 44°50'E 31°04'E
Sierra Soma South	Dakar Richard Toll, 5–10 km S <b>a Leone</b> Makeni <b>lia</b> Sar Uanle <b>A frica</b> Acornhoek Adinyale Farm	14°40'N, 16°20'N, 08°50'N, 02°40'N, 24°32'S, 24°55'S.	17°30'W 15°3'0'W 12°15'W 44°50'E 31°04'E 28°15'E
Sierra Soma South	Dakar Richard Toll, 5–10 km S <b>a Leone</b> Makeni <b>lia</b> Sar Uanle <b>Africa</b> Acornhoek Adinvale Farm Alicedale	14°40'N, 16°20'N, 08°50'N, 02°40'N, 24°32'S, 24°55'S, 33°19'S.	17°30'W 15°3'0'W 12°15'W 44°50'E 31°04'E 28°15'E 26°05E
Sierra Soma South	Dakar Richard Toll, 5–10 km S <b>a Leone</b> Makeni <b>lia</b> Sar Uanle <b>A frica</b> Acornhoek Adinvale Farm Alicedale Ashton	14°40'N, 16°20'N, 08°50'N, 02°40'N, 24°32'S, 24°55'S, 33°19'S, 33°50'S	17°30'W 15°3'0'W 12°15'W 44°50'E 31°04'E 28°15'E 26°05E 20°04'F
Sierr: Soma South	Dakar Richard Toll, 5–10 km S <b>a Leone</b> Makeni <b>Jia</b> Sar Uanle <b>A Africa</b> Acornhoek Adinvale Farm Alicedale Ashton Barberenan	14°40'N, 16°20'N, 08°50'N, 02°40'N, 24°32'S, 24°55'S, 33°19'S, 33°50'S,	17°30'W 15°3'0'W 12°15'W 44°50'E 31°04'E 28°15'E 26°05E 20°04'E 25°50'E
Sierr: Soma South	Dakar Richard Toll, 5–10 km S <b>a Leone</b> Makeni <b>lia</b> Sar Uanle <b>A frica</b> Acornhoek Adinvale Farm Alicedale Ashton Barbarspan Baviaanskloof	14°40'N, 16°20'N, 08°50'N, 02°40'N, 24°32'S, 24°55'S, 33°19'S, 33°50'S, 33°50'S,	17°30'W 15°3'0'W 12°15'W 44°50'E 31°04'E 28°15'E 26°05E 20°04'E 25°50'E 25°50'E
Sierr: Soma South	Dakar Richard Toll, 5–10 km S <b>a Leone</b> Makeni J <b>ia</b> Sar Uanle <b>a Africa</b> Acornhoek Adinvale Farm Alicedale Ashton Barberspan Baviaanskloof	14°40'N, 16°20'N, 08°50'N, 02°40'N, 24°32'S, 24°55'S, 33°19'S, 33°50'S, 26°50'S, 33°56'S,	17°30'W 15°3'0'W 12°15'W 44°50'E 31°04'E 28°15'E 26°05E 20°04'E 25°50'E 24°23'E
Sierr: Soma South	Dakar Richard Toll, 5–10 km S <b>a Leone</b> Makeni J <b>ia</b> Sar Uanle <b>A Africa</b> Acornhoek Adinvale Farm Alicedale Ashton Barberspan Baviaanskloof Beaufort West Barfontain	14°40'N, 16°20'N, 08°50'N, 02°40'N, 24°32'S, 24°55'S, 33°19'S, 33°50'S, 26°50'S, 33°56'S, 32°20'S,	17°30'W 15°3'0'W 12°15'W 44°50'E 31°04'E 28°15'E 26°05E 20°04'E 25°50'E 24°23'E 22°38'E
Sierr: Soma South	Dakar Richard Toll, 5–10 km S <b>a Leone</b> Makeni <b>lia</b> Sar Uanle <b>a Africa</b> Acornhoek Adinvale Farm Alicedale Ashton Barberspan Baviaanskloof Beaufort West Benfontein	14°40'N, 16°20'N, 08°50'N, 02°40'N, 24°32'S, 24°55'S, 33°50'S, 26°50'S, 33°56'S, 32°20'S, 28°42'S,	17°30'W 15°3'0'W 12°15'W 44°50'E 31°04'E 28°15'E 26°05E 20°04'E 25°50'E 24°23'E 22°38'E 24°59'E
Sierr: Soma South	Dakar Richard Toll, 5–10 km S <b>a Leone</b> Makeni <b>lia</b> Sar Uanle <b>A frica</b> Acornhoek Adinvale Farm Alicedale Ashton Barberspan Baviaanskloof Beaufort West Benfontein Bergyliet	14°40'N, 16°20'N, 08°50'N, 02°40'N, 24°32'S, 24°55'S, 33°50'S, 26°50'S, 33°56'S, 32°20'S, 28°42'S, 34°04'S,	17°30'W 15°3'0'W 12°15'W 44°50'E 31°04'E 28°15'E 26°05E 20°04'E 25°50'E 24°23'E 22°38'E 24°59'E 18°28'E
Sierr: Soma South	Dakar Richard Toll, 5–10 km S A Leone Makeni Jia Sar Uanle Africa Acornhoek Adinvale Farm Alicedale Ashton Barberspan Baviaanskloof Beaufort West Benfontein Bergvliet Bethlehem	14°40'N, 16°20'N, 08°50'N, 02°40'N, 24°32'S, 24°55'S, 33°50'S, 26°50'S, 33°50'S, 26°50'S, 33°56'S, 32°20'S, 28°42'S, 34°04'S, 30°58'S,	17°30'W 15°3'0'W 12°15'W 44°50'E 31°04'E 28°15'E 26°05E 20°04'E 25°50'E 24°23'E 22°38'E 24°59'E 18°28'E 21°41'E
Sierra Soma South	Dakar Richard Toll, 5–10 km S A Leone Makeni Jia Sar Uanle Africa Acornhoek Adinvale Farm Alicedale Ashton Barberspan Baviaanskloof Beaufort West Benfontein Bergvliet Bethlehem Bingap 184	14°40'N, 16°20'N, 08°50'N, 02°40'N, 24°32'S, 24°55'S, 33°50'S, 26°50'S, 33°50'S, 26°50'S, 33°56'S, 32°20'S, 28°42'S, 34°04'S, 30°58'S, 28°54'S,	17°30'W 15°3'0'W 12°15'W 44°50'E 31°04'E 28°15'E 26°05E 20°04'E 25°50'E 24°23'E 22°38'E 24°59'E 18°28'E 21°41'E 22°59'E
Sierra Soma South	Dakar Richard Toll, 5–10 km S <b>Leone</b> Makeni <b>Jia</b> Sar Uanle <b>Africa</b> Acornhoek Adinvale Farm Alicedale Ashton Barberspan Baviaanskloof Beaufort West Benfontein Bergvliet Bethlehem Bingap 184 Bitterfontein	14°40'N, 16°20'N, 08°50'N, 02°40'N, 24°32'S, 24°55'S, 33°50'S, 26°50'S, 33°56'S, 32°20'S, 28°42'S, 34°04'S, 30°58'S, 28°54'S, 31°05'S,	17°30'W 15°3'0'W 12°15'W 44°50'E 31°04'E 28°15'E 26°05E 20°04'E 25°50'E 24°23'E 22°38'E 24°59'E 18°28'E 21°41'E 22°59'E 18°22'E
Sierra Soma South	Dakar Richard Toll, 5–10 km S <b>a Leone</b> Makeni <b>lia</b> Sar Uanle <b>A frica</b> Acornhoek Adinvale Farm Alicedale Ashton Barberspan Baviaanskloof Beaufort West Benfontein Bergvliet Bethlehem Bingap 184 Bitterfontein Bloemfontein	14°40'N, 16°20'N, 08°50'N, 02°40'N, 24°32'S, 24°55'S, 33°50'S, 26°50'S, 33°50'S, 26°50'S, 33°56'S, 32°20'S, 28°42'S, 34°04'S, 30°58'S, 28°54'S, 31°05'S, 29°08'S,	17°30'W 15°3'0'W 12°15'W 44°50'E 31°04'E 28°15'E 26°05E 20°04'E 25°50'E 24°23'E 22°38'E 24°59'E 18°28'E 21°41'E 22°59'E 18°22'E 26°04'E
Sierra Soma South	Dakar Richard Toll, 5–10 km S A Leone Makeni lia Sar Uanle Africa Acornhoek Adinvale Farm Alicedale Ashton Barberspan Baviaanskloof Beaufort West Benfontein Bergvliet Bethlehem Bingap 184 Bitterfontein Bloemfontein Bloemfontein Bloemfontein Blyde River Canyon Bot. Res.	14°40'N, 16°20'N, 08°50'N, 02°40'N, 24°32'S, 24°55'S, 33°50'S, 26°50'S, 33°56'S, 32°20'S, 28°42'S, 34°04'S, 30°58'S, 28°54'S, 31°05'S, 29°08'S, 24°30'S,	17°30'W 15°3'0'W 12°15'W 44°50'E 31°04'E 28°15'E 20°04'E 25°50'E 24°23'E 22°38'E 24°59'E 18°28'E 21°41'E 22°59'E 18°22'E 26°04'E 30°52'E
Sierr: Soma South	Dakar Richard Toll, 5–10 km S A Leone Makeni Jia Sar Uanle A Africa A Cornhoek A dinvale Farm A licedale A shton Barberspan Baviaanskloof Beaufort West Benfontein Bergvliet Bethlehem Bingap 184 Bitterfontein Bloemfontein Bloemfontein Blyde River Canyon Bot. Res. Bokmakierie Game Res.	14°40'N, 16°20'N, 08°50'N, 02°40'N, 24°32'S, 24°55'S, 33°50'S, 26°50'S, 33°56'S, 32°20'S, 28°42'S, 34°04'S, 30°58'S, 28°54'S, 31°05'S, 29°08'S, 24°30'S, 24°30'S, 24°33'S,	17°30'W 15°3'0'W 12°15'W 44°50'E 31°04'E 28°15'E 20°04'E 25°50'E 24°23'E 24°59'E 18°28'E 21°41'E 22°59'E 18°22'E 26°04'E 30°52'E 31°02'E
Sierr: Soma South	Dakar Richard Toll, 5–10 km S A Leone Makeni Jia Sar Uanle A Africa A Cornhoek A dinvale Farm A licedale A shton Barberspan Baviaanskloof Beaufort West Benfontein Bergvliet Bethlehem Bingap 184 Bitterfontein Bloemfontein Bloemfontein Bloemfontein Bloemfontein Blyde River Canyon Bot. Res. Bokmakierie Game Res. Bontebok Nat. Park	14°40'N, 16°20'N, 08°50'N, 02°40'N, 24°32'S, 24°55'S, 33°50'S, 26°50'S, 33°56'S, 32°20'S, 28°42'S, 34°04'S, 31°05'S, 29°08'S, 24°30'S, 24°33'S, 34°04'S,	17°30'W 15°3'0'W 12°15'W 44°50'E 31°04'E 28°15'E 20°04'E 25°50'E 24°23'E 24°23'E 24°59'E 18°28'E 21°41'E 22°59'E 18°22'E 26°04'E 30°52'E 31°02'E 20°27'E
Sierr: Soma South	Dakar Richard Toll, 5–10 km S A Leone Makeni Jia Sar Uanle A Africa A cornhoek A dinvale Farm A licedale A shton Barberspan Baviaanskloof Beaufort West Benfontein Bergvliet Bethlehem Bingap 184 Bitterfontein Bloemfontein Bloemfontein Bloemfontein Bloyde River Canyon Bot. Res. Bokmakierie Game Res. Bontebok Nat. Park Boshof Table Farm	14°40'N, 16°20'N, 08°50'N, 02°40'N, 24°32'S, 24°55'S, 33°50'S, 26°50'S, 33°56'S, 32°20'S, 28°42'S, 34°04'S, 30°58'S, 29°08'S, 24°30'S, 24°33'S, 34°04'S, 28°43'S.	17°30'W 15°3'0'W 12°15'W 44°50'E 31°04'E 28°15'E 20°04'E 25°50'E 24°23'E 24°23'E 24°59'E 18°22'E 26°04'E 30°52'E 31°02'E 20°27'E 24°55'E
Sierr: Soma South	Dakar Richard Toll, 5–10 km S <b>A Leone</b> Makeni <b>Jia</b> Sar Uanle <b>A frica</b> <b>A cornhoek</b> A dinvale Farm A licedale A shton Barberspan Baviaanskloof Beaufort West Benfontein Bergvliet Bethlehem Bingap 184 Bitterfontein Bloemfontein Bloemfontein Bloemfontein Blokenfontein Bokmakierie Game Res. Bontebok Nat. Park Boshof Table Farm Brandvlei	14°40'N, 16°20'N, 08°50'N, 02°40'N, 24°32'S, 24°32'S, 24°55'S, 33°50'S, 26°50'S, 33°56'S, 32°20'S, 28°42'S, 34°04'S, 30°58'S, 29°08'S, 24°30'S, 24°30'S, 24°33'S, 34°04'S, 30°25'S.	17°30'W 15°3'0'W 12°15'W 44°50'E 31°04'E 28°15'E 20°04'E 25°50'E 24°23'E 24°23'E 24°59'E 18°22'E 26°04'E 22°59'E 18°22'E 26°04'E 30°52'E 31°02'E 20°27'E 24°55'E 20°30'F
Sierr: Soma South	Dakar Richard Toll, 5–10 km S <b>A Leone</b> Makeni <b>Jia</b> Sar Uanle <b>A frica</b> <b>A cornhoek</b> Adinvale Farm Alicedale Ashton Barberspan Baviaanskloof Beaufort West Benfontein Bergyliet Bethlehem Bingap 184 Bitterfontein Bloemfontein Bloemfontein Bloemfontein Bloken Kat. Park Boshof Table Farm Brandvlei Brits	14°40'N, 16°20'N, 08°50'N, 02°40'N, 24°32'S, 24°55'S, 33°50'S, 26°50'S, 33°56'S, 32°20'S, 28°42'S, 34°04'S, 30°58'S, 29°08'S, 24°30'S, 24°30'S, 24°30'S, 24°33'S, 34°04'S, 28°43'S, 30°25'S, 25°30'S	17°30'W 15°3'0'W 12°15'W 44°50'E 31°04'E 28°15'E 20°04'E 25°50'E 24°23'E 24°59'E 18°28'E 21°41'E 22°59'E 18°22'E 26°04'E 30°52'E 31°02'E 20°27'E 24°55'E 20°30'E 27°45'F
Sierr: Soma South	Dakar Richard Toll, 5–10 km S <b>A Leone</b> Makeni <b>Jia</b> Sar Uanle <b>A Africa</b> Acornhoek Adinvale Farm Alicedale Ashton Barberspan Baviaanskloof Beaufort West Benfontein Bergvliet Bethlehem Bingap 184 Bitterfontein Bloemfontein Bloemfontein Bloemfontein Blokmakierie Game Res. Bokmakierie Game Res. Bontebok Nat. Park Boshof Table Farm Brandvlei Brits Butfielsfontein Farm	14°40'N, 16°20'N, 08°50'N, 02°40'N, 24°32'S, 24°55'S, 33°50'S, 26°50'S, 33°56'S, 32°20'S, 28°42'S, 34°04'S, 29°08'S, 24°30'S, 24°30'S, 24°30'S, 24°30'S, 24°30'S, 25°34'S	17° 30'W 15° 3'0'W 12° 15'W 44° 50'E 31° 04'E 28° 15'E 20° 04'E 25° 00'E 24° 23'E 24° 50'E 24° 23'E 24° 59'E 18° 22'E 26° 04'E 20° 24'E 20° 27'E 20° 27'E 20° 27'E 20° 30'E 27° 45'E 27° 10'E
Sierr: Soma South	Dakar Richard Toll, 5–10 km S A Leone Makeni Jia Sar Uanle A Africa A cornhoek A dinvale Farm A licedale A shton Barberspan Baviaanskloof Beaufort West Benfontein Bergvliet Bethlehem Bingap 184 Bitterfontein Bloemfontein Bloemfontein Bloyde River Canyon Bot. Res. Bokmakierie Game Res. Bontebok Nat. Park Boshof Table Farm Brandvlei Brits Buffelsfontein Farm	14°40'N, 16°20'N, 08°50'N, 02°40'N, 24°32'S, 24°55'S, 33°19'S, 33°50'S, 26°50'S, 33°56'S, 32°20'S, 28°42'S, 34°04'S, 30°58'S, 28°54'S, 31°05'S, 29°08'S, 24°30'S, 24°30'S, 24°30'S, 24°30'S, 25°34'S, 30°25'S,	17° 30'W 15° 3'0'W 12° 15'W 44° 50'E 31° 04'E 28° 15'E 26° 05E 20° 04'E 25° 50'E 24° 23'E 22° 38'E 22° 38'E 22° 38'E 21° 41'E 22° 59'E 18° 22'E 28° 24'E 20° 04'E 30° 52'E 31° 02'E 20° 27'E 24° 55'E 20° 30'E 27° 45'E 27° 10'E 27° 10'E
Sierr: Soma South	Dakar Richard Toll, 5–10 km S A Leone Makeni Jia Sar Uanle A Africa Acornhoek Adinvale Farm Alicedale Ashton Barberspan Baviaanskloof Beaufort West Benfontein Bergvliet Bethlehem Bingap 184 Bitterfontein Bloemfontein Bloyde River Canyon Bot. Res. Bokmakierie Game Res. Bontebok Nat. Park Boshof Table Farm Brandvlei Brits Buffelsfontein Farm Burgersdorp Caladar	14°40'N, 16°20'N, 08°50'N, 02°40'N, 24°32'S, 24°55'S, 33°19'S, 33°50'S, 26°50'S, 33°56'S, 32°20'S, 28°42'S, 34°04'S, 30°58'S, 28°54'S, 31°05'S, 29°08'S, 24°30'S, 24°30'S, 24°30'S, 25°39'S, 25°39'S, 25°34'S, 30°59'S,	17° 30' W 15° 3' 0' W 12° 15' W 44° 50' E 31° 04' E 28° 15' E 26° 05E 20° 04' E 24° 23' E 22° 38' E 21° 41' E 28° 59' E 18° 22' E 26° 04' E 30° 52' E 31° 02' E 20° 30' E 20° 30' E 20° 30' E 27° 45' E 27° 10' E 26° 19' E
Sierr: Soma South	Dakar Richard Toll, 5–10 km S A Leone Makeni Jia Sar Uanle A Arrica Acornhoek Adinvale Farm Alicedale Ashton Barberspan Baviaanskloof Beaufort West Benfontein Bergvliet Bethlehem Bingap 184 Bitterfontein Bloemfontein Bloemfontein Blyde River Canyon Bot. Res. Bokmakierie Game Res. Bohtebok Nat. Park Boshof Table Farm Brandvlei Brits Buffelsfontein Farm Burgersdorp Caledon	14°40'N, 16°20'N, 08°50'N, 02°40'N, 24°32'S, 24°55'S, 33°50'S, 26°50'S, 33°50'S, 26°50'S, 33°56'S, 32°20'S, 28°42'S, 34°04'S, 28°54'S, 31°05'S, 29°08'S, 24°30'S, 24°30'S, 24°30'S, 28°43'S, 30°25'S, 25°34'S, 30°59'S, 34°16'S,	17°30'W 15°3'0'W 12°15'W 44°50'E 31°04'E 28°15'E 26°05E 20°04'E 25°50'E 24°23'E 22°38'E 24°59'E 18°28'E 21°41'E 22°59'E 18°22'E 26°04'E 30°52'E 31°02'E 20°27'E 24°55'E 20°30'E 27°45'E 27°10'E 26°19'E
Sierr: Soma South	Dakar Richard Toll, 5–10 km S A Leone Makeni Jia Sar Uanle A Africa A cornhoek A dinvale Farm Alicedale Ashton Barberspan Baviaanskloof Beaufort West Benfontein Bergvliet Bethlehem Bingap 184 Bitterfontein Bloemfontein Bloemfontein Blyde River Canyon Bot. Res. Bokmakierie Game Res. Bontebok Nat. Park Boshof Table Farm Brandvlei Brits Buffelsfontein Farm Burgersdorp Caledon Calvinia	14°40'N, 16°20'N, 08°50'N, 02°40'N, 24°32'S, 24°55'S, 33°50'S, 26°50'S, 33°56'S, 32°20'S, 28°42'S, 34°04'S, 30°58'S, 28°54'S, 31°05'S, 29°08'S, 24°30'S, 24°30'S, 28°43'S, 30°25'S, 25°34'S, 30°59'S, 34°16'S, 31°30'S,	17°30'W 15°3'0'W 12°15'W 44°50'E 31°04'E 28°15'E 26°05E 20°04'E 25°50'E 24°23'E 22°38'E 24°59'E 18°28'E 21°41'E 22°59'E 18°22'E 20°04'E 20°27'E 24°55'E 20°30'E 27°45'E 27°10'E 26°19'E 19°25'E 19°45'E
Sierr: Soma South	Dakar Richard Toll, 5–10 km S A Leone Makeni Jia Sar Uanle Africa Acornhoek Adinvale Farm Alicedale Ashton Barberspan Baviaanskloof Beaufort West Benfontein Bergvliet Bethlehem Bingap 184 Bitterfontein Bloemfontein Bloemfontein Blyde River Canyon Bot. Res. Bokmakierie Game Res. Bontebok Nat. Park Boshof Table Farm Brandvlei Brits Buffelsfontein Farm Burgersdorp Caledon Calvinia Camps Bay	14°40'N, 16°20'N, 08°50'N, 02°40'N, 24°32'S, 24°55'S, 33°50'S, 26°50'S, 33°50'S, 26°50'S, 33°56'S, 32°20'S, 28°42'S, 34°04'S, 20°58'S, 28°54'S, 31°05'S, 29°08'S, 24°30'S, 24°33'S, 34°04'S, 28°43'S, 30°25'S, 25°34'S, 30°59'S, 34°16'S, 31°30'S, 33°57'S,	17°30'W 15°3'0'W 12°15'W 44°50'E 31°04'E 28°15'E 26°05E 20°04'E 25°50'E 24°23'E 22°38'E 24°59'E 18°28'E 21°41'E 22°59'E 18°22'E 20°27'E 24°55'E 20°30'E 27°45'E 27°10'E 26°19'E 19°25'E 19°45'E 18°23'E
Sierr: Soma South	Dakar Richard Toll, 5–10 km S <b>a Leone</b> Makeni <b>lia</b> Sar Uanle <b>A frica</b> Acornhoek Adinvale Farm Alicedale Ashton Barberspan Baviaanskloof Beaufort West Benfontein Bergvliet Bethlehem Bingap 184 Bitterfontein Bloemfontein Bloemfontein Blyde River Canyon Bot. Res. Bokmakierie Game Res. Bontebok Nat. Park Boshof Table Farm Brandvlei Brits Buffelsfontein Farm Burgersdorp Caledon Calvinia Camps Bay Canton, Rust 280	14°40'N, 16°20'N, 08°50'N, 02°40'N, 24°32'S, 24°55'S, 33°50'S, 26°50'S, 33°50'S, 26°50'S, 33°56'S, 32°20'S, 28°42'S, 34°04'S, 30°58'S, 28°54'S, 31°05'S, 29°08'S, 24°30'S, 24°30'S, 24°30'S, 25°34'S, 30°25'S, 30°59'S, 34°16'S, 31°30'S, 33°57'S, 22°53'S,	17° 30' W 15° 3' 0' W 12° 15' W 44° 50' E 31° 04' E 28° 15' E 26° 05E 20° 04' E 25° 50' E 24° 23' E 22° 38' E 24° 59' E 18° 28' E 21° 41' E 22° 59' E 18° 22' E 20° 04' E 30° 52' E 31° 02' E 20° 30' E 27° 45' E 27° 10' E 26° 19' E 19° 25' E 19° 45' E 18° 23' E 28° 54' E
Sierr: Soma South	Dakar Richard Toll, 5–10 km S <b>a Leone</b> Makeni <b>lia</b> Sar Uanle <b>A frica</b> Acornhoek Adinvale Farm Alicedale Ashton Barberspan Baviaanskloof Beaufort West Benfontein Bergvliet Bethlehem Bingap 184 Bitterfontein Bloemfontein Blyde River Canyon Bot. Res. Bokmakierie Game Res. Bontebok Nat. Park Boshof Table Farm Brandvlei Brits Buffelsfontein Farm Burgersdorp Caledon Calvinia Camps Bay Canton, Rust 280 Cape Flats	14°40'N, 16°20'N, 08°50'N, 02°40'N, 24°32'S, 24°55'S, 33°50'S, 26°50'S, 33°50'S, 26°50'S, 33°56'S, 32°20'S, 28°42'S, 34°04'S, 30°58'S, 28°44'S, 30°58'S, 28°44'S, 30°58'S, 28°44'S, 30°58'S, 28°43'S, 30°25'S, 25°34'S, 30°59'S, 34°16'S, 31°30'S, 33°57'S, 22°53'S, 34°02'S,	17° 30'W 15° 3'0'W 12° 15'W 44° 50'E 31° 04'E 28° 15'E 20° 04'E 26° 05E 20° 04'E 22° 38'E 22° 38'E 24° 59'E 18° 28'E 21° 41'E 22° 59'E 18° 22'E 20° 27'E 20° 27'E 20° 27'E 20° 27'E 20° 27'E 20° 30'E 27° 45'E 20° 30'E 27° 45'E 19° 25'E 19° 45'E 18° 23'E 28° 54'E 18° 35'E
Sierr: Soma South	Dakar Richard Toll, 5–10 km S A Leone Makeni Jia Sar Uanle A Africa A cornhoek A dinvale Farm A licedale A shton Barberspan Baviaanskloof Beaufort West Benfontein Bergvliet Bethlehem Bingap 184 Bitterfontein Bloemfontein Blyde River Canyon Bot. Res. Bokmakierie Game Res. Bontebok Nat. Park Boshof Table Farm Brandvlei Brits Buffelsfontein Farm Burgersdorp Caledon Calvinia Camps Bay Canton, Rust 280 Cape Flats Cape of Good Hope Nature Res.	14°40'N, 16°20'N, 08°50'N, 02°40'N, 24°32'S, 24°55'S, 33°50'S, 26°50'S, 33°56'S, 32°20'S, 28°42'S, 34°04'S, 30°58'S, 28°44'S, 30°58'S, 28°44'S, 30°58'S, 28°44'S, 30°25'S, 25°39'S, 34°04'S, 30°59'S, 34°16'S, 31°30'S, 33°57'S, 22°53'S, 34°02'S, 34°02'S, 34°02'S, 34°02'S, 34°02'S, 34°18'S,	17° 30'W 15° 3'0'W 12° 15'W 44° 50'E 31° 04'E 28° 15'E 20° 04'E 26° 05E 20° 04'E 22° 36'E 24° 23'E 24° 59'E 18° 28'E 21° 41'E 22° 59'E 18° 22'E 20° 27'E 20° 27'E 20° 27'E 20° 27'E 20° 30'E 27° 45'E 20° 30'E 27° 45'E 19° 25'E 19° 45'E 18° 23'E 28° 54'E 18° 23'E 28° 54'E 18° 25'E 18° 25'E

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## **Revision of Afrotropical** Zelotes

Cape Town	33°55′S,	18°25′E
Cederberg	32°21′S,	19°10′E
Ceres	33°22′S,	19°20′E
Cofimvaba	32°00′S,	27°35′E
Colchester	33°39′S,	25°50′E
Constantia	34°02′S,	18°23′E
Cookhouse	32°43′S,	25°48′E
Cradock	32°08′S,	25°38′E
Croc Valley	25°30′S,	30°58′E
Dassen Island	33°25′S,	18°05′E
Dawn's Pride Farm	28°33′S,	29°47′E
De Aar	30°40′S,	24°00′E
Deelfontein 482	27°07′S,	26°35′E
Deelhoek	28°54′S,	26°07′E
Dendron	23°23′S,	29°19′E
Dewetsdorp	29°23′S,	26°46′E
Donkerhoek Farm	25°34′S,	27°10′E
Douglas	29°04′S,	23°46′E
Droogelaagte Farm	24°55′S,	28°15′E
Duikersfontien Farm	26°09′S,	26°11′E
Dullstroom	25°14′S,	30°07′E
Dunbrody	33°27′S,	25°32′E
Durban	29°51′S,	31°01′E
Dwaalboom Farm	25°34′S,	27°10′E
East London	33°00′S,	27°35′E
Edenville	26°34′S,	27°40′E
Eierfontein	31°05′S,	24°18′E
Elgin	34°09′S,	19°03′E
Empangeni	28°45′S,	31°45′E
Florisbad	28°46′S,	26°05′E
Golden Gate	28°30′S.	28°35′E
Grahamstown	33°19′S.	26°22′E
Grant's Hill	29°06′S.	26°13′E
Gt Winterhoek Mts.	33°30′-40′S, 24°40′	-25°20′E
Green Valley Nuts	29°35′S.	22°56′E
Groblersdal	25°15′S.	29°29′E
Grootfontein 105	32°04′S.	18°39′E
Hanover	31°04′S.	24°27′E
Hartebeestpan 330	27°52′S.	25°01′E
Haweguas Mts.	33°08–10′S, 19	°03–06′E
Hectorspruit	25°27′S.	31°41′E
Heidelburg	34°24′S.	20°50′E
Hermanus	34°25′S	19°17′E
Hopefield	33°09′S.	18°08′E
Hout Bay	34°02′S	18°21/E
Invalazi River Natal	28°20′S	32°10′E
Johannesburg	26°13′S	28°05′E
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Kalahari Gemshok Park	25° 30' S	20° 30' E
Kalk Bay and Mts	23° 90° B, 34°07′ S	18°27'E
Kalkfontein Farm	25°15′S	29°29'E
Karoo National Park	20°18'S	22°29'E
Kimberley	28°41′S	22°27'E 24°42'E
Kintoss	26°25′S	29°08'E
Klein Kariba	20° 25° 8, 24° 50′ S	29 00 E
Kloofendal	24° 30° 5, 26° 10′ S	20 20 L 27°45'E
Knysna	20°10'5, 34°01'S	27 45 L 23°03′E
Kagmanskloof	33°40'S	20°06'E
Koginaliskiool	55 49 5, 20°50/S	20 00 E
Konnaggas Konniagrus	29 30 S, 20°03/S	1/ 31 E
Kopplesius Kromrant	29 03 S, 20°22/S	20 15 E
Kiomiant	29 22 5,	23 U3 E
Krugorsdrift Dom	23°43'5,	21 19 E
Kiugersuriit Dam	28° 33' S,	23°37'E
Kuruman Ladiamith	2/~2/`S,	23°2/'E
Ladismith	33~30′S,	21°18′E
Laingsburg	33°13'S,	20°51'E
Lajuma Farm	23°02′S,	29°26′E
Langberg 138	28°55′S,	24°36′E
Lichtenburg Farm	26°09′S,	26°11′E
Loskop Dam	25°24′S,	29°22′E
T 1 1	a 5 a 1 a / a	

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Magaliesberg	26°00′S,	27°32′E
Maitland Dunes	33°45′S,	25°22′E
Makalali	24°09′S	30°42′E
Marble Hall Farm	25°00′S	29°25′E
Marlevale Bird Sanctury	26°15′S	28°40′E
Matijesfontein	20° 15' S, 33° 16' S	20°35′E
Matroosberg Mts	33°28′S	10°50'E
Meltonwold	31°27′S	22°45′E
Mfongosi	28°43′S	30°48′ F
Middelburg	20° 45′ 5, 31° 29′ S	25°00'E
Montagu	$33^{\circ}47'$ S	20°08′E
Montagu Montaux Sources Royal Nat Park	$33 47 3$ , $28^{\circ} 46' S$	20 00 E 28°53'E
Mt. Zahra National park	20 + 0 3, $22 \circ 16' S$	20 JJ E
Muizenberg	$32 \ 10 \ 3,$ $34^{\circ}06' \ S$	23 29 E
Mainhlava Divor Mouth	$34^{\circ}00^{\circ}3$ ,	10 2/ E
Nevel Hill	31 20 3,	29 40 E
Nduma Cama Bas	29 00 3,	20 14 E
Ndumo Game Res.	20, 53, 5,	32°15'E
Ngome State Porest	27-49-5,	31°20 E
Nigel	26°31′S,	28°21'E
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Nyala Game Reserve	28°45′S,	31°45′E
Nystroom	24°41′S,	28°26′E
Oudtshoorn	33°33′S,	22°16′E
Pafuri	22°27′S,	31°21′E
Pakhuis Pass	32°21′S,	19°10′E
Paternoster	32°49′S,	17°54′E
Pietermaritzburg	29°38′S,	30°28′E
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Platteklip Gorge	33°19′S,	18°22′E
Plettenberg Bay	34°01′S,	23°22′E
Pongola	27°28′S,	32°07′E
Poortjiesfontein	30°45′S,	24°15′E
Port Elizabeth	33°58′S,	25°40′E
Port Nolloth	29°15′S,	16°55′E
Portville Rd	33°01′S,	18°59′E
Preil 281	28°39′S,	24°34′E
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Queenstown	31°52′S,	26°52′E
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Rabiesberg	33°37′S,	19°40′E
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Roedtan	24°37′S,	29°05′E
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Roodeplaat Research Station	25°41′S,	28°18′E
Roodepoort	26°10′S,	27°45′E
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Sabi Reserve	25°02′S.	31°08′E
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St. James Bay	34°14′S	18°26′E
Salt River	34°25′S	19°50'E
Sedgefield	34°01′S	22°52′E
Settlers Farm	24° 50′ S	28°50′E
Signal Hill	33°56′S	18°28'E
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Southfield	55 50 B, 2501518	17 14 E 310/0/E
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Stemenous	33°3/'S,	10° 30° E
Stompheus Staard	$52^{-}42^{-}8$ ,	1/ 45 E
Suand Suchasha anna d Matana D	33-36'S,	18°28'E
Suikerbosrand Nature Res.	26° 30' S,	28°22′E

	Sundays River Valley	32°24'S	24°28′F
	Suurbraak 10 km E	34°01′S	20°46′E
	Swartberg Nature Res	33°31′S	26°57′E
	Swartberg Pass	22°15/S	20 J/ L
	Swallondom	24°01/S	22 IJ E
	Swellendalli Tabla Ma Wast Slava 2286	54 01 5,	20 20 E
	Table ML, west Slope 35'S	30-39 5, 18	20-23 E
		33*21*8,	20°03 E
	Tshipise Hot Springs	22°36′S,	30° 10' E
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	Vaalwater	24°24′S,	28°03′E
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	Witwatersrand Nature Res	26°15′S	27°04 E
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	Weinseter	23 43 5,	20 11 E
	worcester	33°40°S,	19°25'E
	wynespoort	22° 56° S,	29° 54' E
	Zeekoevlei	34°04′S,	18°33'E
Sudar	1		
	En Nahud	12°40′N,	28°30′E
	Gilo Imatang Mts.	04°05′N,	32°55′E
	Wadi Halfa	21°56′N,	31°20′E
Tanza	inia		
	Ibaya Camp & Hill, see Mkomazi		
	Kibondo	03°32′S.	30°40′E
	Kiboshi	03°14′S.	37°18′E
	Kilimaniaro	03°04′S	37°22′E
	Mazumbai Usambara Mts	04°49′S	38°30′E
	Mkomazi Game Res 03°45′-04°30	0' 12 B, 0'S 37°45'-	-38°45′E
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	Mt Hanang	$03^{\circ}21^{\circ}3,$ $04^{\circ}26'S$	37 20 E
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2.1110	Baobah Spring	2201215	30°10/E
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	DulawayO	20 IU S,	20 JJ E

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Chikwarakwara	22°19′S.	31°05′E
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Chinangali	20°15′S	28°47′E
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Insiza	19°47′S,	29°10′E
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Kemayanga Camp	16°27'S	31°03′E
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Marondora	10 + 7 3, $18 \circ 12 S$	29 JU E
Marunadahna Wildonnasa Anao	16 12 3, $16^{\circ}20/S$	21 º 20/E
Mavuradonna whiderness Area	$10 \ 50 \ 5,$	31 30 E
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Mpindo	19°12'S,	2/*36'E
Mpotu	18°40'S,	26° 55' E
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