

**Four new species of *Dolichognatha* Pickard-Cambridge, 1869 from Brazil and description of the female of *D. maturaca* Lise, 1993 (Araneae: Tetragnathidae)**

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**Summary**

The female of *Dolichognatha maturaca* Lise is described. Its range is extended to other localities in the state of Amazonas and it is recorded for the first time in the state of Acre, Brazil. Four new species are described: *Dolichognatha kampa* from Acre, *D. mapia* and *D. erwini* from Amazonas, and *D. pinheiral* from Paraíba, Sergipe, Espírito Santo, Rio de Janeiro and São Paulo, all in Brazil.

**Introduction**

The genus *Dolichognatha* was proposed by Pickard-Cambridge (1869), who designated *D. nietneri* as type species. This species was described based on a male collected in Sri Lanka. Up to now eleven species have been described from the Americas, but only the Nearctic and Central American species were revised by Levi (1981), and only *D. pentagona* (Hentz, 1850) occurs in North America and the West Indies. Ten other species have been described from Central and South America: *D. cygnea* (Simon, 1893) from Venezuela; *D. tigrina* Simon, 1893 from Venezuela and St Vincent; *D. spinosa* (Petrunkevitch, 1939) from Panama; *D. minuscula* (Mello-Leitão, 1940) from Guyana; *D. quadrituberculata* (Keyserling, 1883) from Peru; *D. edwardsi* (Simon, 1904) from Chile; *D. proserpina* (Mello-Leitão, 1943), *D. maturaca* Lise, 1993 and *D. ducke* Lise, 1993, all from Brazil. Recently, *D. lodiculafaciens* (Hingston, 1932) from Guyana, the tenth species, was transferred to *Dolichognatha* from *Cyrtophora* Simon by Levi (1997). These species were described based only on the type specimens or on very few individuals and are poorly represented in scientific collections.

*Dolichognatha proserpina*, described from Rio Grande do Sul, in the south of Brazil, probably does not belong to this genus. According to the description given by Mello-Leitão (1943) this species has “a cylindrical abdomen, more longer than wide”, that resembles the abdomen of *Leucauge* species.

In this paper we include only Brazilian material of *Dolichognatha*, from the collections of the Instituto Butantan (IBSP) and the Museu de Zoologia da Universidade de São Paulo (MZUSP) where we found four new species and the female of *D. maturaca*.

*Dolichognatha maturaca* was described from a single male, collected in Maturacá, São Gabriel da Cachoeira, Amazonas. This species is recorded here for the first time in the state of Acre and new records are presented for other regions in the state of Amazonas. Three of the new species described here occur in the Brazilian Amazon

region, in the states of Acre and Amazonas. The fourth species is described from north-east and south-east Brazil in the Brazilian Atlantic Forest. The genus now contains a total of fourteen Neotropical species.

**Material and methods**

Descriptions and abbreviations follow Levi (1981). Palpus terminology is based on Coddington (1990) and Hormiga *et al.* (1995). The technique proposed by Levi (1965) was used to study the internal structures of the female epigyna. Micrographs were obtained with a JEOL (JSM 840A) scanning electron microscope from the Laboratório de Microscopia Eletrônica do Departamento de Física Geral do Instituto de Física da Universidade de São Paulo (USP). All measurements are in mm.

**Genus *Dolichognatha* Pickard-Cambridge, 1869**

*Dolichognatha* O. Pickard-Cambridge, 1869: 387. Type species by monotypy *D. nietneri* O.P.-Cambridge, 1869: 388, pl. 12, figs. 39–45.

Note: For complete generic synonymy see Levi (1981).

**Diagnosis:** The genus *Dolichognatha* differs from other tetragnathid genera by the presence of a projecting cephalic region forming a tubercle with AME (Figs. 12–13, 17–18, 23, 27), abdomen with four dorsal humps (Figs. 11–12), males with long and projecting chelicerae (Figs. 1, 23, 32), palpus with subtriangular paracymbium (Figs. 9, 24, 33), and embolus with metine embolic apophysis (MEA: Figs. 7, 24).

***Dolichognatha maturaca* Lise, 1993 (Figs. 1–15)**

*Dolichognatha maturaca* Lise, 1993: 96–97, figs. 1–13 (male holotype from Maturacá, São Gabriel da Cachoeira, Amazonas, Brazil, 12 October 1990, A. A. Lise, deposited in Museu de Ciência e Tecnologia da PUC/RS, no. 1341, not examined); Platnick, 1998: 457.

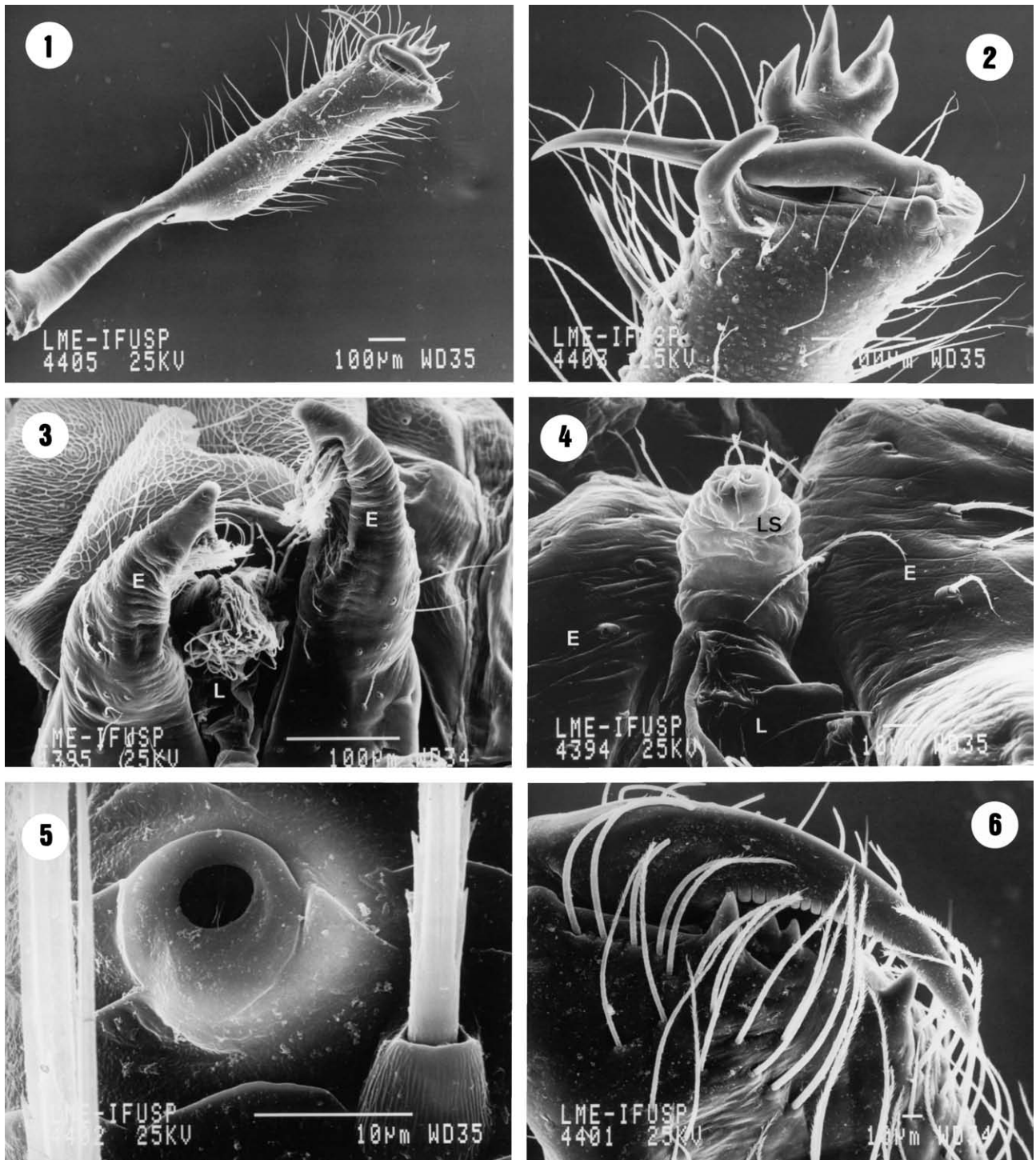
**Diagnosis:** The male of *D. maturaca* resembles *D. mapia* sp. n. and *D. pentagona* in the presence of a branch in the embolus (cf. Fig. 24 and Levi, 1981: fig. 13 and Lise, 1993: figs. 11–12), but differs from these species by the presence of a broader apical region of MEA (Fig. 7 and Lise, 1993: figs. 9, 12, as median apophysis), paracymbium with two branches (Fig. 9 and Lise, 1993: figs. 9–10), and femur I with 1-1-1 ventral spines. The female of *D. maturaca* differs from the other species by the epigynum atrium being narrow with a wide sclerotised border (Fig. 14), spermathecae globose and fertilisation ducts enlarged (Fig. 15).

**Description: Male:** Described by Lise (1993). Supplemented here with photomicrographs: chelicerae with strong basal constriction, promarginal region with a conspicuous, curved, distal projection, and retro-marginal region with four conical teeth on a projection and a pair of long and narrow ones on internal margin (Figs. 1–2), all called spines by Lise (1993: 97, figs. 4, 6); endites long and distally conical (Fig. 3); labium with

labral spur, a prominent cylindrical and grooved median projection (Fig. 4); tarsal organ of leg I with circular opening, slightly projecting (Fig. 5); palp with enlarged conductor with rounded apex; MEA long, narrow at base, broader apically and strongly striated, embolus with thickened base and narrowed apex (Fig. 7); tarsal organ of cymbium semicircular with wide oval opening (Fig. 8); paracymbium conspicuous, with two branches, subtriangular and with slightly bent apex (Fig. 9); retro-lateral tibial apophysis strong and subtriangular,

grooved, with apical sensillum inside groove, and three basal trichobothria (Fig. 10).

*Female* (IBSP 12608): Carapace yellowish white with median dorsal dark brown band, medially interrupted in some specimens. Lateral margins dark grey. Chelicerae, endites and labium yellowish white. Sternum with anterior half yellowish white, posterior half brown. Legs yellowish white with dark grey median bands. Abdomen dorsally grey, posteriorly white, laterally with black stains among white spots. Abdominal humps black,



Figs. 1–6: *Dolichognatha maturaca* Lise. **1** Male chelicera, dorsal view; **2** Ditto, detail of apex, showing teeth; **3** Labium and endites, ventral view (E=endites, L=labium); **4** Labral spur (LS), ventral view (E=endites, L=labium); **5** Tarsal organ of leg I, dorsal view; **6** Female chelicera, ventral view.

laterally white (Figs. 11–12). Total length 2.90. Carapace length 1.15, width 0.90. Eye diameters and inter-distances: AME on tubercle in anterior region of carapace (Fig. 13); AME 0.08, ALE 0.08, PME 0.12, PLE 0.08; AME-AME 0.06, AME-ALE 0.08, PME-PME 0.06, PME-PLA 0.06, ALE-PLA touching. MOQ: length 0.28, anterior width 0.22, posterior width 0.28, in dorsal view. Chelicerae: length 0.60, with cheliceral boss slightly prominent; three promarginal teeth, distal one larger than others (Fig. 13), and four retromarginal teeth, one next to fang more developed and three times larger than others (Fig. 6). Leg measurements: I: femur 1.60/patella 0.40/tibia 1.25/metatarsus 1.00/tarsus 0.55/total 4.80. II: 1.30/0.45/1.00/0.80/0.40/3.95. III: 1.25/0.35/0.45/0.35/0.25/2.65. IV: 1.05/0.4/0.55/0.45/0.30/2.75. Abdomen with four paramedian humps in posterodorsal region, two anterior humps smaller than posterior ones (Figs. 11–12). Border of epigynum m-shaped (Fig. 14). Copulation ducts narrow and sinuous, fertilisation ducts enlarged (Fig. 15).

**Variation:** Three males: total length 2.05–2.10; carapace 1.05–1.15; femur I 1.70–1.85. Five females: total length 2.75–3.35; carapace 1.15–1.45; femur I 1.50–1.80.

**Distribution:** Previously known from state of Amazonas and recorded for the first time in state of Acre, Brazil.

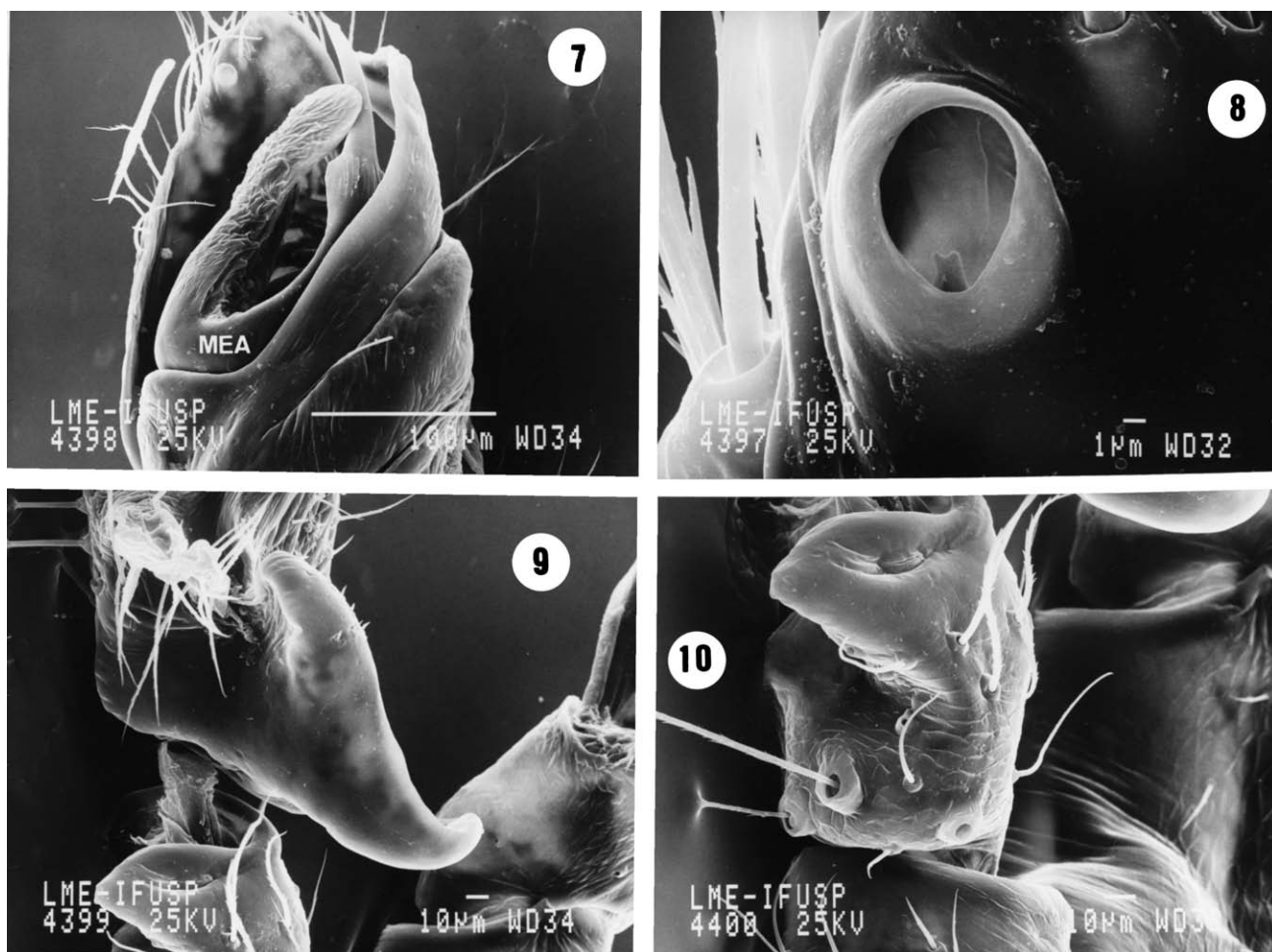
**Material examined:** BRAZIL: Acre: Parque Nacional da Serra do Divisor (Tipologia 7, Sítio 4), 1♀, 14 February 1996, L. Resende & R. Vieira, IBSP 12608; (Tipologia 9, Sítio 10), 1♀, 24 March 1996, L. Resende & R. Vieira, IBSP 12298; (Pedernal), 1♀, 13 November 1996, R. S. Vieira *et al.*, IBSP 9122; 1♀, 05–25 November 1996, R. S. Vieira *et al.*, IBSP 9253; Rio Branco: Reserva Extrativista Humaitá, 1♂ 1♀, 12 April 1996, Eq. IBSP/SMNK, deposited in IBSP 8804 and IBSP 8805 respectively. Amazonas: Borba: Rio Mapiá, 2♂, 12 April 1996, Eq. IBSP/SMNK, deposited in IBSP 8834 and IBSP 8863 respectively.

***Dolichognatha kampa*, sp. n.** (Figs. 16–20)

**Type material:** Female holotype from Parque Nacional da Serra do Divisor, Acre, Brazil, 14 March 1996, L. Resende & R. Vieira leg., deposited in IBSP 12630.

**Etymology:** Kampa is the name of the Indian tribe that lives near Parque Nacional da Serra do Divisor, Acre, Brazil.

**Diagnosis:** The female of *D. kampa* sp. n. resembles those of *D. maturaca* and *D. mapia* sp. n. in the shape of the atrium border, but differs from these species by the smaller atrium, median area of border mammiliform



Figs. 7–10: *Dolichognatha maturaca* Lise, male. **7** Palp, ventral view (MEA=metine embolic apophysis); **8** Tarsal organ of cymbium, dorsal view; **9** Paracymbium, retrolateral view; **10** Retrolateral tibial apophysis, showing sensillum and dorsal trichobothria.

(Fig. 19), and spermathecae with oval anterior projection (Fig. 20).

*Description: Female* (holotype): Carapace yellowish white with median dorsal brown band. Chelicerae yellowish white. Labium and endites yellowish. Sternum with anterior half yellow, posterior half brown. Legs with same coloration patterns as *D. maturaca*. Abdomen white with dorsal grey stains and lateral black stains; anterior pair of humps with black spot on anterior face (Figs. 16–17). Total length 4.70. Carapace length 2.00, width 1.45. Eye diameters and interdistances: AME on tubercle in anterior region of carapace; AME 0.10, ALE 0.10, PME 0.15, PLE 0.10; AME-AME 0.06, AME-ALE 0.15, PME-PME 0.08, PME-PLE 0.10, ALE-PLE touching. MOQ: length 0.20, anterior width 0.30, posterior width 0.40, in dorsal view. Chelicerae: length 1.00, strong, with conspicuous triangular cheliceral boss; three promarginal teeth (Fig. 18) and four retromarginal teeth as in *D. maturaca*. Leg measurements: I: femur 2.90/patella 0.90/tibia 2.15/metatarsus 2.20/tarsus 0.90/

total 9.05. II: 2.20/0.70/1.55/1.60/0.65/6.70. III: 1.25/0.50/0.75/0.80/0.45/3.75. IV: 1.80/0.60/1.10/1.15/0.50/5.15. Abdomen with four conical humps of similar size, first pair on anterior third, second pair median (Figs. 16–17). Epigynum with small atrium. Spermathecae large, visible through integument. Copulation ducts straight and narrow, fertilisation ducts broad and medially curved (Figs. 19–20).

*Male*: Unknown.

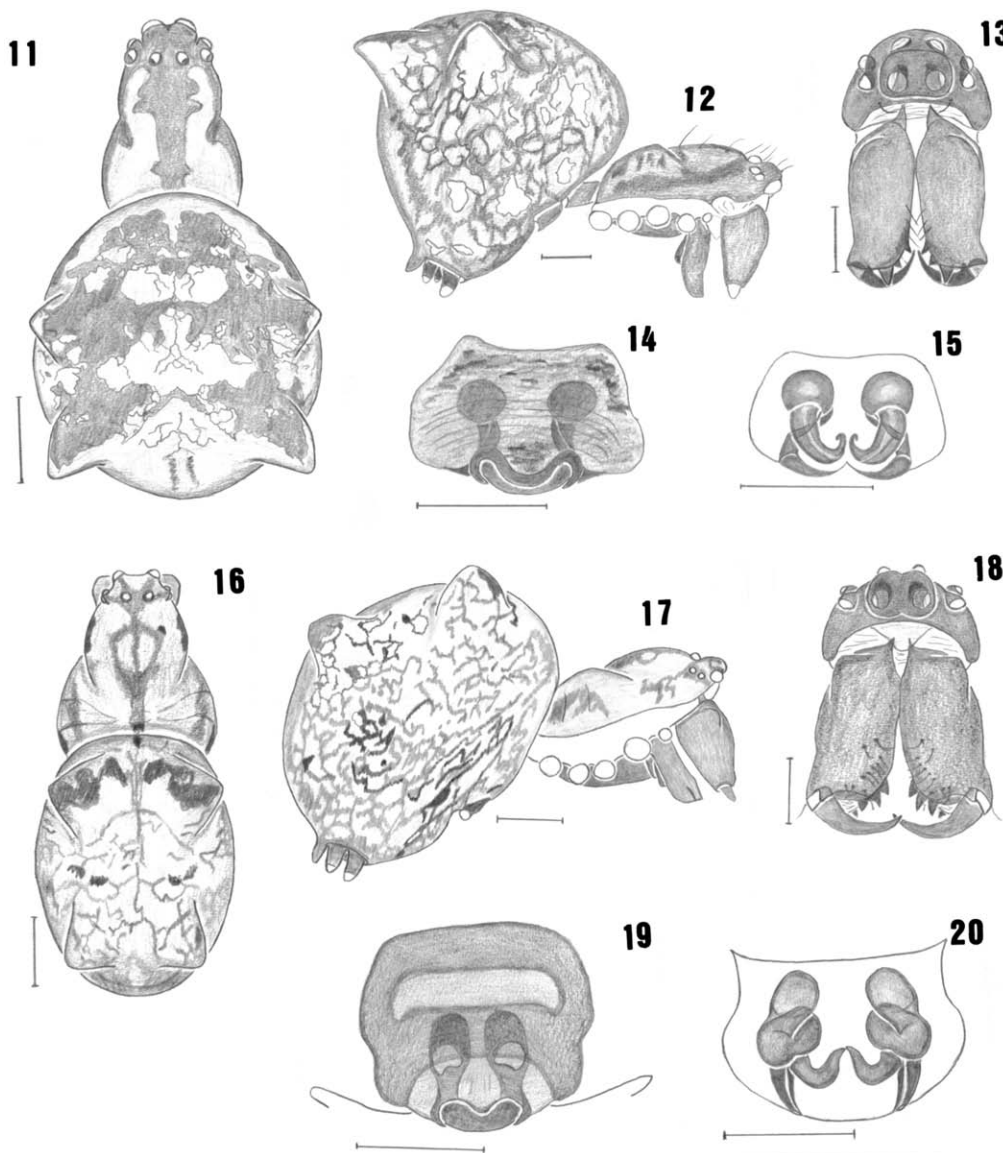
*Distribution*: Acre, Brazil.

*Material examined*: Only the type.

***Dolichognatha mapia*, sp. n.** (Figs. 21–29)

*Type material*: Male holotype and female paratype from Rio Mapiá, Borba, Amazonas, Brazil, 22 April 1996, Eq. IBSP/SMNK, deposited in IBSP 8839; female paratype, same data, deposited in IBSP 20637.

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

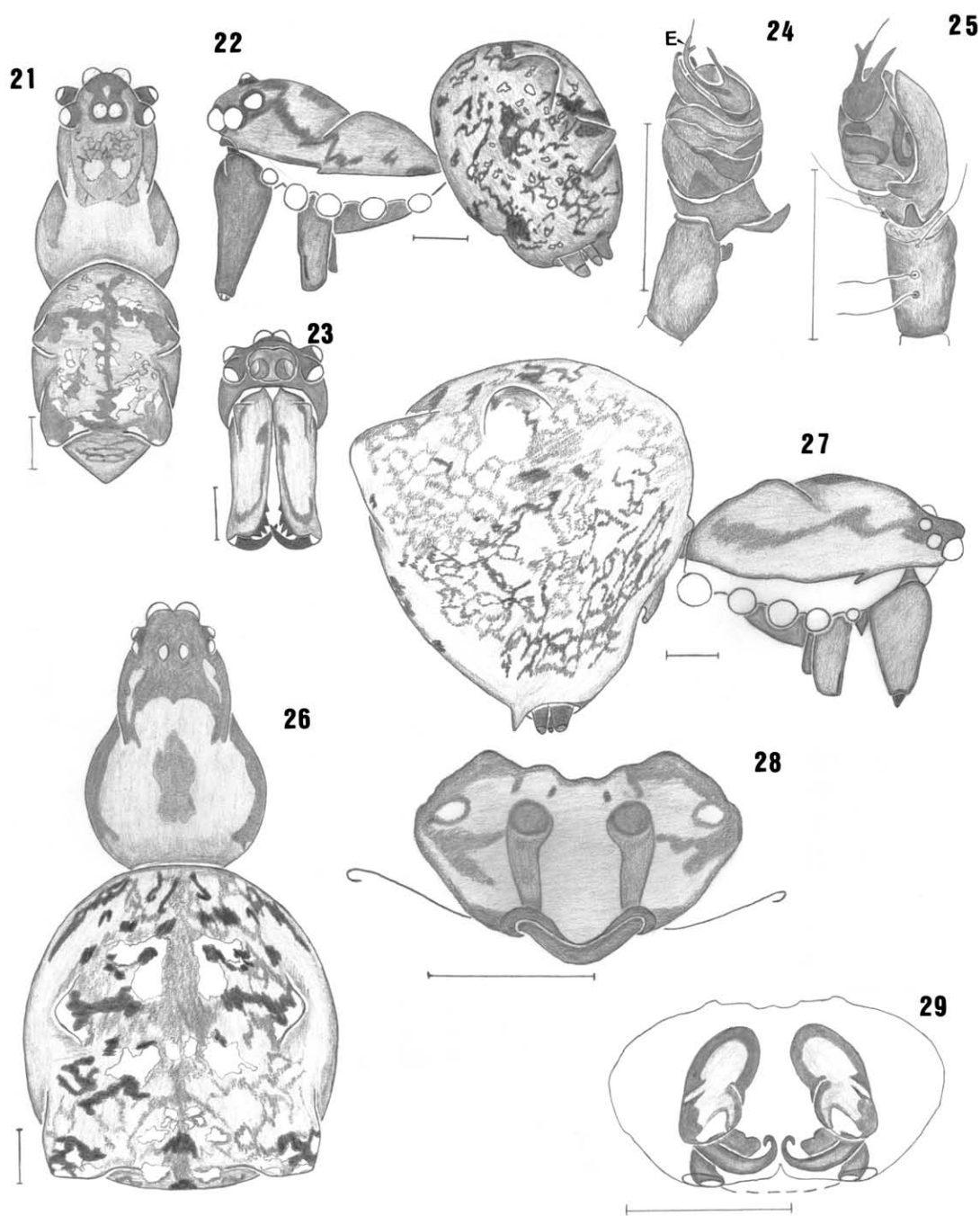


Figs. 11–20: **11–15** *Dolichognatha maturaca* Lise, female. **11** Body, dorsal view; **12** Ditto, lateral view; **13** Chelicerae and eye region, frontal view; **14** Epigynum, ventral view; **15** Ditto, dorsal view. **16–20** *Dolichognatha kampa* sp. n., female. **16** Body, dorsal view; **17** Ditto, lateral view; **18** Chelicerae and eye region, frontal view; **19** Epigynum, ventral view; **20** Ditto, dorsal view. Scale lines=0.25 mm.

*Diagnosis:* The male of *D. mapia* sp. n. resembles those of *D. maturaca* and *D. pentagona* in the presence of a branch on the embolus (Fig. 24) but differs by a very narrow MEA apical region (Fig. 24) and by femur I having two very short latero-distal spines. The female differs from the other females by the border of the epigynum being heavily sclerotised laterally but only slightly sclerotised medially (Fig. 28) and by the large oval spermathecae (Fig. 29).

*Description:* *Male* (holotype): Carapace yellowish white with cephalic region brown and two orange spots in posterior third (Figs. 21–22). Chelicerae brown, with dark frontal band. Labium and endites yellowish.

Sternum with anterior half yellow, posterior half brown. Legs yellowish brown with grey transverse bands near articulations. Abdomen dark brown with dorsal white and black spots; dorsal humps with anterior face brownish, posterior face grey with small white spots (Figs. 21–22). Total length 2.12. Carapace length 1.08, width 0.80, cephalic region slightly projecting. Eye diameters and interdistances: AME 0.10, ALE 0.12, PME 0.16, PLE 0.12; AME-AME 0.06, AME-ALE 0.06, PME-PME touching, PME-PLP 0.08, ALE-PLP touching. MOQ: length 0.16, anterior width 0.20, posterior width 0.30. Chelicerae: length 0.80, with triangular cheliceral boss (Fig. 23), with three



Figs. 21–29: *Dolichognatha mapia* sp. n. **21–25** Male. **21** Body, dorsal view; **22** Ditto, lateral view; **23** Chelicerae and eye region, frontal view; **24** Palp, ventral view (E=embolus); **25** Ditto, retrolateral view. **26–29** Female. **26** Body, dorsal view; **27** Ditto, lateral view; **28** Epigynum, ventral view; **29** Ditto, dorsal view. Scale lines=0.25 mm.

promarginal teeth and four small retromarginal teeth, one next to fang. Leg measurements: I: femur 1.12/patella 0.38/tibia 0.80/metatarsus 0.72/tarsus 0.42/total 3.44. II: 1.06/0.32/0.74/0.68/0.38/3.18. III: 0.80/0.22/0.26/0.40/0.32/2.00. IV: 0.88/0.26/0.46/0.54/0.22/2.36. Abdomen with four conical humps, posterior pair larger than anterior pair (Fig. 21). Male palp with paracymbium very strong, with triangular tip, embolus narrow with branch in distal area (Fig. 24).

*Female* (paratype): Coloration with same basic pattern as male except for carapace, with uniformly brown cephalic region, and abdomen more pigmented (Figs. 26–27). Total length 3.40. Carapace length 1.55, width 1.15, cephalic projection as in male. Eye diameters and interdistances: AME 0.10, ALE 0.10, PME 0.12, PLE 0.10; AME-AME 0.06, AME-ALE 0.10, PME-PME 0.08, PME-PLE 0.02, ALE-PLE 0.02. MOQ: length 0.16, anterior width 0.22, posterior width 0.32. Chelicerae: length 0.65, teeth as in female of *D. matu-raca*. Leg measurements: I: femur 1.80/patella 0.55/tibia 1.45/metatarsus 1.25/tarsus 0.55/total 5.60. II: 1.30/0.45/1.05/0.90/0.45/4.15. III: 1.05/0.40/0.55/0.45/0.30/2.75. IV: 1.30/0.45/1.75/0.90/0.25/3.60. Abdomen with humps as in male (Fig. 26). Border of epigynum m-shaped and with laterally elongated atrium (Fig. 28). Internally with short copulatory ducts, very long and curved fertilisation ducts, and spermathecae constricted medially (Fig. 29).

*Distribution*: Amazonas, Brazil.

*Other material examined*: One immature with paratype, deposited in IBSP 20637.

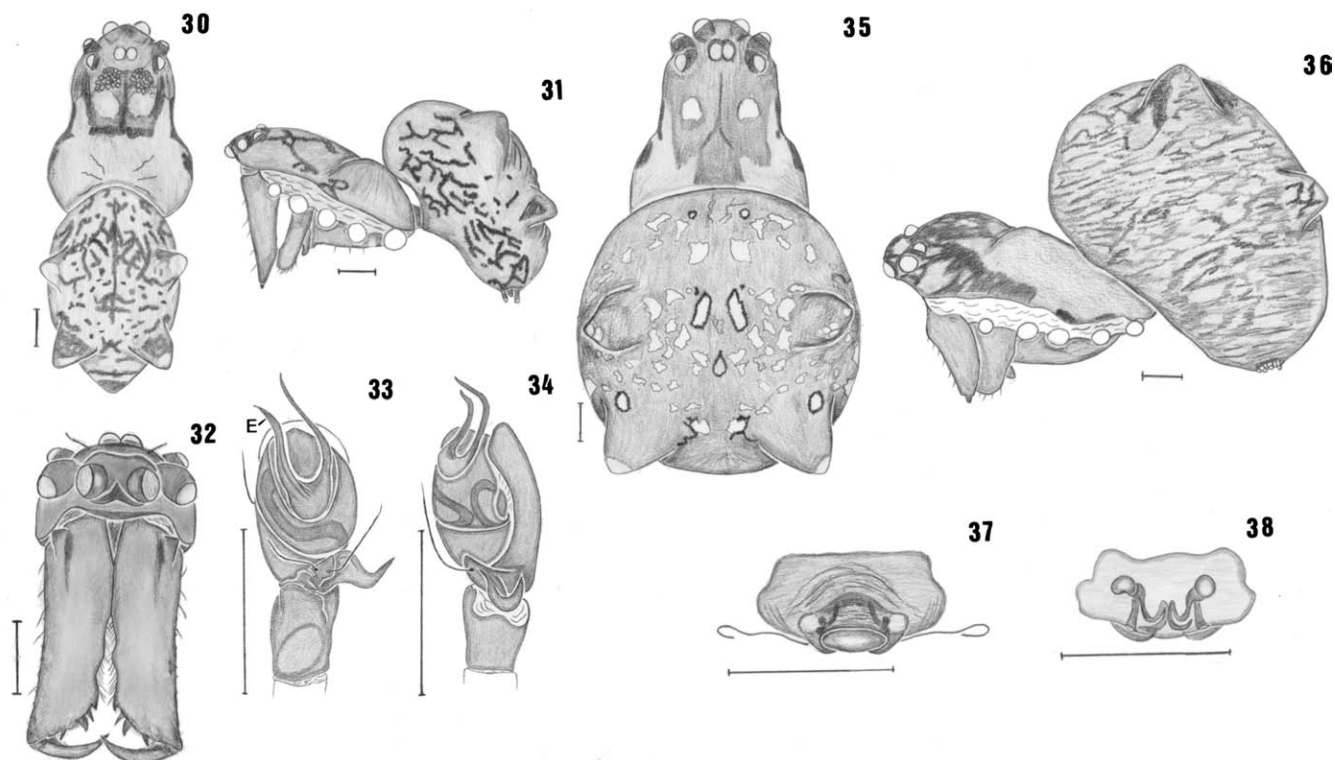
### *Dolichognatha erwini*, sp. n. (Figs. 30–38)

*Type material*: Male holotype and female paratype from Paraná do Xiboreinho, Rio Negro, Manaus, Amazonas, Brazil, 7 August 1979, J. Adis, T. L. Erwin & G. M. Montgomery leg., deposited in INPA.

*Etymology*: The specific name is a patronym in honour of T. L. Erwin, one of the collectors of the type.

*Diagnosis*: The male of *D. erwini* sp. n. resembles that of *D. pinheiral* sp. n. in the shape of the embolus and absence of a branch on the embolus, but differs by the long and filiform embolus and MEA, and paracymbium narrowed at tip (Fig. 33). The female differs by the oval and slightly projecting median area of the atrium (Fig. 37) and the very elongated and sinuous fertilisation ducts (Fig. 38).

*Description*: *Male* (holotype): Carapace brown, with cephalic region black except for posterior area with two white spots (Fig. 30). Chelicerae dark brown. Labium, endites and sternum brown. Legs yellowish brown with darker stripes on articulations. Abdomen dark brown with dorsal and lateral black stripes; humps black at base, white at apex (Fig. 31). Total length 2.05. Carapace length 1.15, width 0.80, with projecting cephalic region. Eye diameters and interdistances: AME 0.08, ALE 0.08, PME 0.12, PLE 0.08; AME-AME 0.06, AME-ALE 0.06, PME-PME touching, PME-PLE 0.06, ALE-PLE 0.08. MOQ: length 0.16, anterior width 0.16, posterior width 0.30. Chelicerae: length 0.70, long with cheliceral boss triangular (Fig. 31), with three promarginal teeth and four retromarginal teeth (Fig. 32).



Figs. 30–38: *Dolichognatha erwini* sp. n. 30–34 Male. 30 Body, dorsal view; 31 Ditto, lateral view; 32 Chelicerae and eye region, frontal view; 33 Palp, ventral view (E=embolus); 34 Ditto, retrolateral view. 35–38 Female. 35 Body, dorsal view; 36 Ditto, lateral view; 37 Epigynum, ventral view; 38 Ditto, dorsal view. Scale lines=0.25 mm.



Leg measurements: I: femur 1.40/patella 0.45/tibia 1.10/metatarsus 0.95/tarsus 0.45/total 4.35. II: 1.15/0.40/0.95/0.90/0.35/3.75. III: 0.90/0.20/0.45/0.35/0.20/2.10. IV: 0.75/0.25/0.55/0.50/0.25/2.30. Abdomen with four conical humps, anterior pair larger (Figs. 30–31). Palp with MEA slightly longer than embolus (Figs. 33–34).

*Female* (paratype): Coloration as in male, except abdomen darker (Figs. 35–36). Total length 2.40. Carapace length 1.15, width 0.90, with cephalic area projecting (Fig. 36). Eye diameters and interdistances: AME 0.08, ALE 0.08, PME 0.12, PLE 0.08; AME-AME 0.06, AME-ALE 0.06, PME-PME touching, PME-PLE 0.04, ALE-PLE 0.08. MOQ: length 0.12, anterior width 0.14, posterior width 0.26. Chelicerae: length 0.85, robust, with long and rounded cheliceral boss, with three promarginal teeth and two retromarginal teeth. Leg measurements: I: femur 0.54/patella 0.18/tibia 0.44/metatarsus 0.40/tarsus 0.20/total 1.76. II: 0.36/0.16/0.34/0.32/0.18/1.36. III: 0.30/0.08/0.14/0.18/0.12/0.82. IV 0.40/0.12/0.22/0.20/0.10/1.04. Abdomen with humps conical (Fig. 35). Epigynum sclerotised with median transverse striations (Fig. 37). Spermathecae oval, copulatory ducts long, narrow and straight (Fig. 38).

*Distribution*: Amazonas, Brazil.

*Material examined*: Only the types.

#### *Dolichognatha pinheiral*, sp. n. (Figs. 39–48)

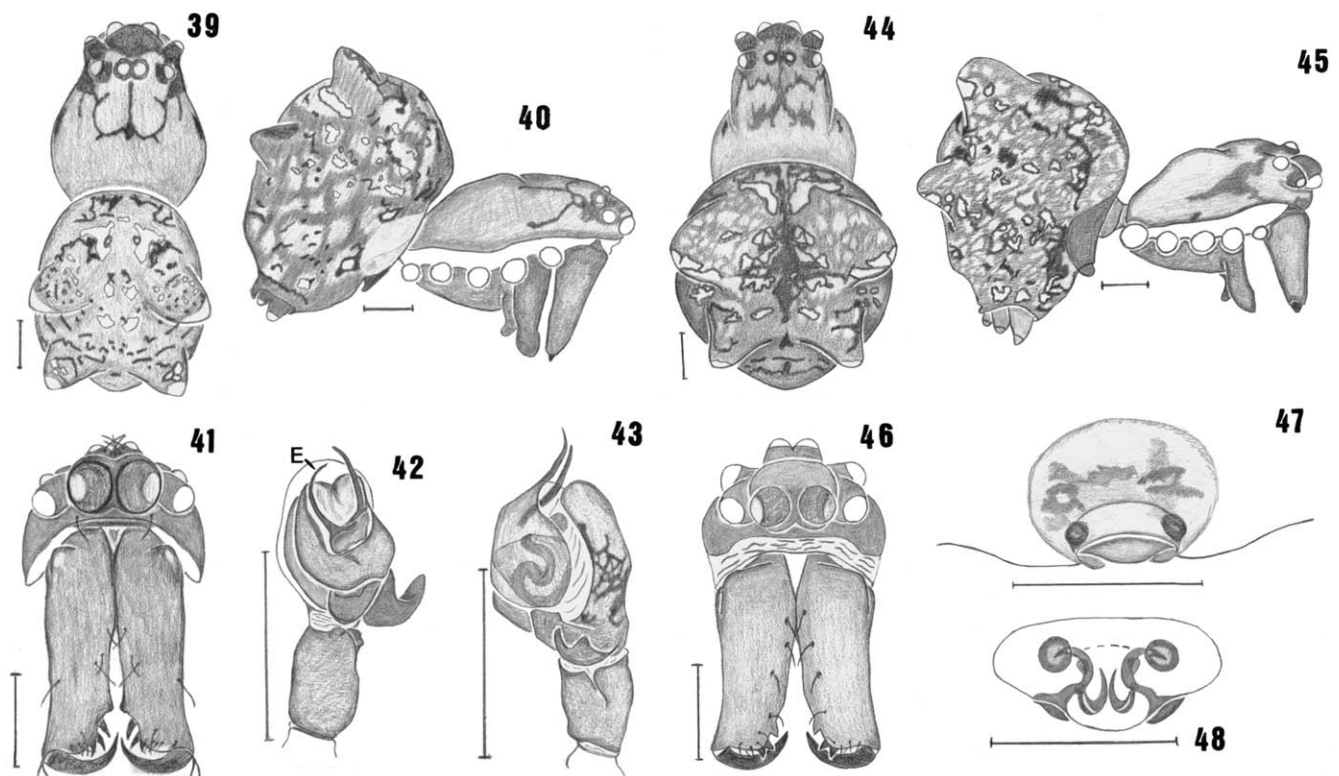
*Type material*: Male holotype and female paratype, from Fazenda Santa Helena, Pinheiral, Rio de Janeiro, Brazil, 05–11 November 1999, A. D. Brescovit *et al.*, deposited in IBSP 25845 and IBSP 25846 respectively.

Paratypes: 1♂ from Rio Bengalas, Nova Friburgo, Rio de Janeiro, Brazil, 21–23 August 1996, B. Bérnils leg., deposited in MZSP 15280; 1♀ from Reserva Florestal Vale do Rio Doce, São Mateus, Espírito Santo, Brazil, 25 July 1997, A. D. Brescovit & A. J. Santos leg., deposited in IBSP 12828.

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

*Diagnosis*: The male of *D. pinheiral* sp. n. resembles that of *D. erwini* sp. n. but differs by the rounded cheliceral boss (Fig. 41), thinner embolus and broader conspicuous paracymbium (Fig. 42). The female of *D. pinheiral* resembles those of *D. pentagona* and *D. erwini* sp. n. in the oval atrium border and globose spermathecae, but differs from these species by the medially projecting posterior central area of the atrium (Fig. 47) and the long, sinuous copulatory ducts (Fig. 48).

*Description*: *Male* (holotype): Carapace brown with W-shaped dark brown line behind ocular region. Clypeus black. Chelicerae brown. Labium and endites yellowish. Sternum yellowish with brown borders. Legs yellowish brown, with dark bands near articulations and femora with ventro-basal black stripes. Abdomen greyish with large number of dark brown stripes and white spots dorsally; humps with posterior face and apex white (Figs. 39–40). Total length 1.92. Carapace length 1.10, width 0.72, cephalic area projecting. Eye diameters and interdistances: AME 0.06, ALE 0.06, PME 0.10, PLE 0.06; AME-AME 0.04, AME-ALE 0.06, PME-PME touching, PME-PLE 0.02, ALE-PLE 0.06. MOQ: length 0.12, anterior width 0.12, posterior width 0.26. Chelicerae: length 0.62, long, with cheliceral boss



Figs. 39–48: *Dolichognatha pinheiral* sp. n. 39–43 Male. 39 Body, dorsal view; 40 Ditto, lateral view; 41 Chelicerae and eye region, frontal view; 42 Male palp, ventral view (E=embolus); 43 Ditto, retrolateral view. 44–48 Female. 44 Body, dorsal view; 45 Ditto, lateral view; 46 Chelicerae and eye region, frontal view; 47 Epigynum, ventral view; 48 Ditto, dorsal view. Scale lines=0.25 mm.

conspicuous and rounded (Fig. 41), with three large promarginal teeth and three small retromarginal teeth. Leg measurements: I: femur 1.42/patella 0.40/tibia 1.10/metatarsus 0.92/tarsus 0.42/total 4.26. II: 1.10/0.32/0.80/0.68/0.34/3.24. III: 0.64/0.20/0.40/0.30/0.18/1.72. IV: 0.86/0.22/0.52/0.34/0.20/2.14. Abdomen with four conical humps (Figs. 39–40). Palp with styliform embolus (Fig. 42).

*Female* (paratype): carapace yellowish white with dark brown cephalic region. Chelicerae brownish. Labium, endites and sternum yellowish. Legs as in *D. maturaca*. Abdomen greyish with large number of dorsal dark brown stripes and some white spots anteriorly; anterior humps with posterior face and apex white, posterior humps with black stripes and anterior and posterior faces white (Figs. 44–45). Total length 2.25. Carapace length 1.00, width 0.75, cephalic area projecting. Eye diameters and interdistances: AME 0.06, ALE 0.08, PME 0.10, PLE 0.08; AME-AME 0.04, AME-ALE 0.08, PME-PME 0.04, PME-PLE 0.08, ALE-PLE 0.08. MOQ: length 0.12, anterior width 0.14, posterior width 0.26. Chelicerae: length 0.52, robust, with cheliceral boss slightly elevated and subtriangular (Fig. 46), with three promarginal teeth and three small retromarginal teeth. Leg measurements: I: femur 1.22/patella 0.38/tibia 1.14/metatarsus 0.78/tarsus 0.38/total 3.90. II: 1.06/0.30/0.70/0.68/0.40/3.14. III: 0.58/0.22/0.40/0.32/0.22/1.74. IV: 0.90/0.26/0.46/0.50/0.28/2.40. Abdomen with rounded humps, posterior pair half size of anterior pair (Figs. 44–45). Epigynum slightly sclerotised, spermathecae visible through integument (Fig. 47). Spermathecae circular, fertilisation ducts long and curved (Fig. 48).

*Variation*: Seven males: total length 1.70–1.92; carapace 0.95–1.11; femur I 1.20–1.42. Two females: total length 1.86–2.25; carapace 0.90–1.00; femur I 1.22–1.25.

*Distribution*: States of Paraíba, Sergipe, Espírito Santo, Rio de Janeiro and São Paulo, Brazil.

*Other material examined*: BRAZIL: *Paraíba*: Areia, Reserva de Pau Ferro, 1♂, 23–29 September 1999, A. D. Brescovit *et al.* (IBSP 25844). *Sergipe*: Crasto, Santa Luzia do Itanhy, 2♂, 09–13 September 1999, A. D. Brescovit *et al.* (IBSP 25843). *Rio de Janeiro*: Pinheiral, Fazenda Santa Helena, 1♂, 05–11 November 1999, A. D. Brescovit *et al.* (IBSP 25847); Petrópolis, Fazenda Ranchinho Porto da Roça (BR040, Km 78.5, 22°29'S, 43°13'W), 1♀, 08–15 February 2000, F. S. Cunha *et al.* (IBSP 26031). *São Paulo*: between Engenheiro Marsilac and Santo Amaro, 1♂, 30 December 1966, P. de Biasi leg. (MZSP 9608); Salesópolis, Estação Ecológica de

Boracéia (23°38'S, 45°52'W), 1♀, 7–10 April 1999, A. D. Brescovit *et al.* (IBSP 26032).

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