

***Ashantia Strand, 1908* is a junior synonym of *Euathlus Ausserer, 1875* (Araneae, Theraphosidae, Theraphosinae)**

Richard C. Gallon

23a Roumania Crescent,
Llandudno, North Wales, LL30 1UP

Summary

The type and only species of *Ashantia* Strand, 1908, previously considered a junior synonym of *Harpactirella* Purcell, 1902 (Harpactirinae Pocock, 1897), was found to possess type III, IV and III/IV intermediate urticating setae, autapomorphies of the Theraphosinae Thorell, 1870. *Ashantia* is therefore removed from synonymy with *Harpactirella* and synonymised with the Neotropical genus *Euathlus* Ausserer, 1875, on the basis of the following characters: absence of stridulatory setae, very few labial cuspules, no retrolateral scopula on femur IV, presence of type III, IV and III/IV intermediate urticating setae, paired divergent spermathecae, unthickened tibia IV and a transverse fovea. The West African type locality of *Ashantia latithorax* Strand, 1908 is considered erroneous. *Euathlus latithorax* comb. n. is redescribed and illustrated for the first time.

Introduction

Ashantia latithorax Strand, 1908 was described briefly from a single female, allegedly collected from Ashanti (=Ghana), West Africa. Strand noted that his new genus, *Ashantia* Strand, 1908, was reminiscent of *Mono-centropus* Pocock, 1897 (Eumenophorinae Pocock, 1897), but differed in its deeper fovea, broader carapace and wide clypeus. Raven (1985: 149), on studying the specimen, found it lacked cheliceral scopulae, stridulatory setae and had few labial cuspules. He synonymised the monotypic genus *Ashantia* with *Harpactirella* Purcell, 1902 (Harpactirinae Pocock, 1897), but qualified this by stating that the “holotype is a larger spider” than other *Harpactirella* species.

In preparation for a revision of the genus *Harpactirella*, the holotype of *Ashantia latithorax* was re-examined.

Methods

Methods follow Gallon (2002), except ocular measurements were obtained microscopically using an eyepiece graticule ± 0.01 mm. Samples of abdominal setae were slide mounted and examined with a compound microscope. All measurements are in mm. Abbreviations: Eyes: AME=anterior median, ALE=anterior lateral, PME=posterior median, PLE=posterior lateral. Leg spines: DPV=distal proventral, DRV=distal retroventral, MPV=medial proventral, MRV=medial retroventral, DMV=distal midventral, PRL=proximal retrolateral, MRL=medial retrolateral, DPD=distal prodorsal, DRD=distal retrodorsal. R=right, L=left. Spinnerets: DS=distal segment. Collections: SMF=Senckenberg Forschungsinstitut und Naturmuseum, Frankfurt am Main, Germany;

ZMB=Museum für Naturkunde der Humboldt-Universität, Berlin, Germany.

Genus *Euathlus* Ausserer, 1875

Euathlus Ausserer, 1875: 188; Smith, 1995: 183; Pérez-Miles *et al.*, 1996: 48.

Orthothrichus Karsch, 1880: 390 (preoccupied).

Phrixotrichus Simon, 1889: 222 (replacement name for *Orthothrichus*).

Paraphysa: Strand, 1907: 221 (misidentification).

Ashantia Strand, 1908: 769. **New synonymy.**

Type species: *Euathlus truculentus* Ausserer, 1875.

Remarks: *Phrixotrichus* was synonymised with *Euathlus* by Schmidt (1996a). Pérez-Miles *et al.* (1996) synonymised *Paraphysa* *sensu* Strand, 1907 with *Euathlus*.

Species included: *E. latithorax* (Strand, 1908) comb. n., *E. pulcherrimaklaasi* (Schmidt, 1991), *E. truculentus* Ausserer, 1875, *E. vulpinus* (Karsch, 1880), *E. vulpinus ater* (Donoso, 1957).

Diagnosis: See Schmidt (1991, 1992, 1993, 1996a, b), Smith (1995) and Pérez-Miles *et al.* (1996).

***Euathlus latithorax* (Strand, 1908), comb. n. (Figs. 1–4)**

Ashantia latithorax Strand, 1908: 770 (D♀); 1916: 50 (♀).

Type material: Holotype ♀ (SMF 2658), allegedly from Ashanti (=Ghana), West Africa (H. Simon).

Remarks: The type locality is erroneous. The specimen probably originated from South America and was subsequently mislabelled (see Discussion). Abdomen stuffed with cotton wool.

Diagnosis: In *E. truculentus* and *E. pulcherrimaklaasi* the spermathecal termini are large and circular (illustrated in Schmidt, 1991), and lack the anterior projection found in *E. latithorax* and *E. vulpinus*. The spermathecae of *E. latithorax* (Fig. 4) and *E. vulpinus* (Fig. 5) show many similarities, such as the nodular termini and serpentine anterior margin. They differ in the placement of the anterior projection; in *E. vulpinus* this is situated distally near the terminus, but in *E. latithorax* it is positioned proximally on the spermatheca. There is a possibility that *E. latithorax* and *E. vulpinus* are synonymous, however this warrants investigation within a detailed revision of the genus, which is beyond the scope of this paper.

Description: Female holotype (SMF 2658) (Fig. 1): Total length, including chelicerae, but excluding spinnerets 43.7. Carapace profile raised at caput, length 15.7, width 16.1. Abdomen length 22.4, width 14.3. Fovea transverse and deep. Ocular tubercle length 2.09, width 2.26 (Fig. 2). Clypeus width 0.49. Eye sizes: AME 0.39, ALE 0.62, PME 0.44, PLE 0.57. Sternum with three pairs of oval sigilla; anterior pair submarginal, posterior two pairs more remote from sternal margin. Labium with 2 extant cuspules, although holes indicate 9 originally (Fig. 3). Maxilla with c. 85 cuspules. Paired glabrous labiosternal areas present on labiosternal suture. DS of posterior spinneret digitiform. Chelicerae with 9 teeth on promargin (L and R). Stridulatory setae absent from chelicerae, palps and legs. Lateral femoral

	Fe	Pa	Ti	Mt	Ta
I	14.8	8.7	12.1	9.6	7.9
II	13.6	7.6	10.1	8.8	7.6
III	11.7	6.7	8.9	9.3	6.8
IV	13.7	7.4	10.6	12.2	7.6
Palp	10.2	5.8	7.2	—	8.0

Table 1: *Euathlus latithorax* (Strand, 1908), comb. n. Lengths of leg and palp segments of female holotype.

scopulae absent. Leg and palp segment lengths in Table 1. Tarsal scopulae: palp, legs I–III integral; leg IV proximal third divided by setae. Metatarsal scopulae: legs I–II 50% (integral); leg III 33% (integral); leg IV 15% (bisected longitudinally by stiff setae). Clavate trichobothria: restricted to V-shaped region on apical three-quarters of tarsus I (24R, 21L). Spination: palp tibia 1DRV (0R), 2DPV; leg I tibia 1DPV, metatarsus 1DMV; leg II tibia 1DPV, metatarsus 2MRV (1R), 1DMV; leg III tibia 1DPV, metatarsus 1MPV, 1DRV, 1DMV, 1DPV, 1DPD, 1DRD; leg IV tibia 1DPV, metatarsus 1MRV, 1MPV, 1DRV, 1DMV, 1DPV, 1PRL, 2MRL, 1DPD, 1DRD. Remaining leg segments aspinose. Coloration: mustard brown, with long fine golden setae on legs. Caput integument darker, but setae rubbed. Strand (1908) originally described the coloration as black or black-brown with golden setae, thus the specimen has faded. Spermathecae (Fig. 4): Paired and diverging at 180°. Anterior margin serpentine. Termini unevenly nodular (1L, 3R). Single anterior projection on proximal section of spermathecae. Urticating setae: type III urticating setae restricted to two dorso-lateral patches on abdomen (Fig. 1). These patches fringed by narrow halo of type IV urticating setae and type III/IV intermediates.

Male: Unknown.

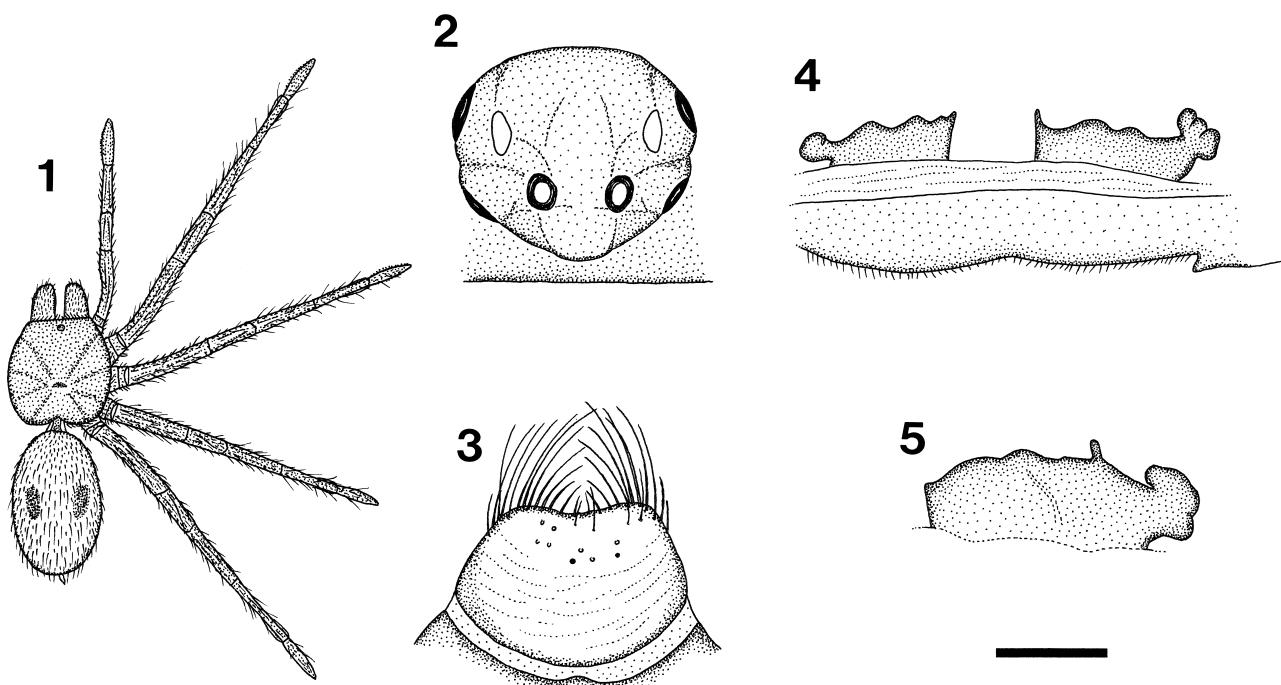
Material examined: Holotype female (SMF 2658) only.

Distribution: Allegedly from Ghana, West Africa, but more likely from South America.

Discussion

Since the presence of type III and IV urticating setae is autapomorphic for the Theraphosinae Thorell, 1870 (Pérez-Miles *et al.*, 1996), their presence on the abdomen of *Ashantia latithorax* places it within this subfamily. Urticating setae are not found in Old World theraphosid subfamilies (Cooke *et al.*, 1972; Bertani & Sayuri Fukushima, 2004), so on this basis the synonymy of *Ashantia* with *Harpactirella* is rejected. The West African type locality of *A. latithorax* is inconsistent with the exclusively New World distribution of theraphosines, and is in all probability erroneous (by mislabelling or accidental importation).

The Theraphosinae is a speciose subfamily with 45 recognised genera (Platnick, 2004). *Ashantia* lacks stridulatory setae, has very few labial cuspules, no retrolateral scopula on femur IV, type III, IV and III/IV intermediate urticating setae, paired spermathecae, unthickened tibia IV and a transverse fovea. This combination of characters is found only in the genus *Euathlus* (Schmidt, 1991, 1992, 1993, 1996a, b; Smith, 1995; Pérez-Miles *et al.*, 1996; R. Bertani, pers. comm.). However, *Melloleitaoina* Gerschman & Schiapelli, 1960 has many of these characters, except for the presence of type IV and type III/IV intermediate urticating setae (Pérez-Miles *et al.*, 1996). Males of *Euathlus* and *Melloleitaoina* are readily distinguished by the apomorphic shape of the embolus (Pérez-Miles *et al.*,



Figs. 1–4: *Euathlus latithorax* (Strand, 1908) comb. n., holotype female (SMF 2658). 1 Dorsal view; 2 Ocular tubercle, dorsal view; 3 Labium, ventral view; 4 Spermathecae, dorsal view. 5 *Euathlus vulpinus* (Karsch, 1880), syntype (ZMB 2050), spermatheca, dorsal view (after photograph in Schmidt, 1996b). Scale line=17.3 mm (1), 1.0 mm (2, 4), 1.4 mm (3), no scale given (5).

1996), but *Ashantia* is known only from a single female specimen. However, the spermathecae of *Ashantia* show marked similarities with those of *Euathlus* species, rather than *Melloleitaoina*. In *Melloleitaoina* the paired spermathecae point anteriorly (Gerschman & Schiapelli, 1973), whereas in *Euathlus* (Schmidt, 1991, 1996b) and *Ashantia* they diverge laterally. The spermathecae of *Ashantia latithorax* and *Euathlus vulpinus* (from Chile) are very similar, differing only in the position of a shared anterior projection (Figs. 4–5). For these reasons *Ashantia* is considered a junior synonym of *Euathlus*.

Acknowledgements

Peter Jäger (SMF) is thanked for the loan of the type material and investigating the accessions book entry for this specimen. Rogério Bertani (Instituto Butantan, Brazil) is thanked for useful discussions relating to this spider and urticating setae of *Euathlus* species. Robert Raven (Queensland Museum, Australia) is thanked for encouraging me to publish this paper.

References

- AUSSERER, 1875: Zweiter Beitrag zur Kenntniss der Arachnidengattung der Territelariae Thorell (Mygalidae Autor). *Verh. zool.-bot. Ges. Wien* **25**: 125–206.
- BERTANI, R. & SAYURI FUKUSHIMA, C. 2004: *Polyspinosa* Schmidt, 1999 (Araneae, Theraphosidae, Eumenophorinae) is a synonym of *Grammostola* Simon, 1892 (Araneae, Theraphosidae, Theraphosinae). *Revta Ibérica Aracnol.* **9**: 329–331.
- COOKE, J. A. L., ROTH, V. D. & MILLER, F. H. 1972: The urticating hairs of theraphosid spiders. *Am. Mus. Novit.* **2498**: 1–43.
- GALLON, R. C. 2002: Revision of the African genera *Pterinochilus* and *Eucratocelus* (Araneae, Theraphosidae, Harpactirinae) with description of two new genera. *Bull. Br. arachnol. Soc.* **12**(5): 201–232.
- GERSCHMAN DE PIKELIN, B. S. & SCHIAPELLI, R. D. 1973: La subfamilia Ischnocolinae (Araneae: Theraphosidae). *Revta Mus. argent. Cienc. nat. Bernardino Rivadavia (Ent.)* **4**(2): 43–77.
- KARSCH, F. 1880: Arachnologische Blätter (Decas I). *Z. ges. naturw. Halle* **53**: 373–409, pl. 12.
- PÉREZ-MILES, F., LUCAS, S. M., DA SILVA, I. & BERTANI, R. 1996: Systematic revision and cladistic analysis of Theraphosinae (Araneae: Theraphosidae). *Mygalomorph* **1**(3): 33–68.
- PLATNICK, N. I. 2004: *The world spider catalog, version 5.0* (Theraphosidae pages updated 12 June 2004). <<http://research.amnh.org/entomology/spiders/catalog/INTRO1.html>>
- PURCELL, W. F. 1902: On the South African Theraphosidae, or “Baviaan” spiders, in the collection of the South African Museum. *Trans. S. Afr. phil. Soc.* **11**(4): 319–347.
- RAVEN, R. J. 1985: The spider infraorder Mygalomorphae (Araneae): cladistics and systematics. *Bull. Am. Mus. nat. Hist.* **182**: 1–180.
- SCHMIDT, G. 1991: Eine neue *Paraphysa*-Art aus Ecuador (Araneida: Theraphosidae: Theraphosinae). *Arachnol. Anz.* **20**: 8–12.
- SCHMIDT, G. 1992: Das Männchen von *Euathlus triculatus* Ausserer 1975 (Araneida: Theraphosidae: Theraphosinae). *Arachnol. Anz.* **3**(7): 9–13.
- SCHMIDT, G. 1993: Zur Unterscheidung der Weibchen der chilenischen *Paraphysa*-Arten (Araneida: Theraphosidae: Theraphosinae). *Arachnol. Anz.* **4**(7): 6–9.
- SCHMIDT, G. 1996a: Die Typusart von *Phrixotrichus* Simon, 1888 (Araneida: Theraphosidae: Theraphosinae). *Arachnol. Mag.* **4**(9): 14–18.
- SCHMIDT, G. 1996b: *Grammostola* ist kein Synonym von *Phrixotrichus* (Araneae: Theraphosidae). *Arthropoda* **4**(4): 67–70.
- SIMON, E. 1889: Etudes arachnologiques. 21e mémoire. XXX. Descriptions de quelques arachnides du Chili et remarques synonymiques sur quelques unes des espèces décrites par Nicolet. *Annls Soc. ent. Fr.* (6) **8**: 217–222.
- SMITH, A. M. 1995: *Tarantula spiders: tarantulas of the U.S.A. and Mexico*. Fitzgerald Publishing, London.
- STRAND, E. 1907: Afrikanische und südamerikanische Aviculariiden, hauptsächlich aus dem naturhistorischen Museum zu Lübeck. *Z. Naturw.* **79**: 170–266.
- STRAND, E. 1908: Diagnosen neuer aussereuropäischer Spinnen. *Zool. Anz.* **32**: 769–773.
- STRAND, E. 1916: Systematische-faunistische Studien über paläarktische, afrikanische und amerikanische Spinnen des Senckenbergischen Museums. *Arch. Naturgesch.* **81**(A9): 1–153.