A NEW SPECIES OF *PHINTELLA* STRAND (ARANEAE: SALTICIDAE) FROM INDIA

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ABSTRACT: A new species from the genus *Phintella* Strand in Bosenberg et Strand, namely *Phintella alboterminus* sp.nov. is described from Chennai, India.

KEY WORDS: Phintella, description, new species, Salticidae, India.

Phintella is placed under the clade Heliophaninae (Maddison et al., 2008). It is widely distributed containing numerous species mainly from the Oriental and Palaearctic regions (Weslowaska, 2010; Zabka, 2012; Weslowaska, 2013). Presently 52 species of *Phintella* are known worldwide (Platnick, 2014), of which 12 species are known from India (Keswani et al., 2012). In this paper, a new species *Phintella alboterminus* sp. nov is being described from Chennai, India.

Spiders of the genus *Phintella* are usually light or colored sometimes covered with metallic iridescent scales. They can be characterized by relatively high cephalothorax, unidentate chelicerae. Palpal tegulum with lobe and bump, embolus usually short, pointed or furcate. Tibia with one or more apophyses. Female internal genitalia simple, insemination ducts of different length, usually not twisted, spermathecae round in most species (Zabka, 2012; Proszynski, 2013).

MATERIALS AND METHODS

Specimens were photographed using DSLR Nikon D60, 18-55mm lens (reversed for macro photographs), preserved in 70% alcohol and later examined using a stereoscopic microscope (NIKON SMZ1000). Male palps were detached, examined and female genitalia were excised using fine surgical scalpel. The epigyne was transferred to Petri dish containing KOH 10% aqueous solution for clearing. USB digital microscope with micro-measure software was used for making measurements. All measurements are in mm (millimeters). The type specimen will be eventually deposited in the Zoological survey of India, regional station, Chennai.

Abbreviations used: ALE = Anterior lateral eyes, AME = Anterior median eyes, PLE = Posterior lateral eyes, PME = Posterior median eyes. AME-AME =Mutual distance between eyes, GPS= Global positioning system.

RESULTS

Phintella alboterminus sp. nov.

(Figs. 1-12)

Description: Male

Total length 2.82; carapace 1.42 long, 1.00 wide; abdomen 1.40 long, 0.97 wide

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Cephalothorax: Blackish, covered with greenish black fine hairs, white stripe of hairs run along the rim of cephalothorax. Eye measurements: AME 0.25, ALE 0.18, PME 0.08, PLE 0.12; AME–AME 0.02, AME–ALE 0.03, PME–PME 0.64, PME–PLE 0.13, ALE–PLE 0.38. Clypeus height 0.07, clypeus covered with white scales, eyes surrounded by reddish orange scales, six spatulate scales protrude from the region between ALE's to PLE's on either side (Figs. 3 & 4). Chelicerae blackish, unidentate. Sternum brownish yellow covered with pale yellow hairs uniformly along the edges, legs yellowish, leg I robust and dark with a small modified spine at the base of tibia ventrally. Leg measurements: I 2.42 (0.77, 0.43, 0.58, 0.37, 0.27); II 1.77 (0.65, 0.25, 0.36, 0.27, 0.24); III 1.87 (0.61, 0.27, 0.32, 0.38, 0.29); IV 2.18 (0.78, 0.29, 0.44, 0.43, 0.24). Leg formula: 1432. Palp brownish, retro lateral tibial apophysis broad at base with pointed tip, tegular bump seen from the retrolateral view, embolus short and bent in s-shaped form (Figs. 9 & 10).

Abdomen: Elongate and ovoid, pairs of white spots arranged on the dorsum, similar spots placed on the lateral sides, anterior part covered by pale brownish scales, lower half covered by darker reddish black hairs, spinnerets covered by whitish scales on the dorsum.

Female: Total length 3.16; carapace 1.48 long, 1.09 wide; abdomen 1.68 long, 1.10 wide. Eye measurements: AME 0.29, ALE 0.14, PME 0.05, PLE 0.14, AME-AME 0.02; AME-ALE 0.03; PME-PME 0.75; PME-PLE 0.17; ALE-PLE 0.44; Leg measurements: I 2.18 (0.76, 0.43, 0.46, 0.30, 0.23); II 1.77 (0.67, 0.27, 0.32, 0.24, 0.27); III 2.08 (0.69, 0.28, 0.40, 0.43, 0.28); IV 2.21 (0.79, 0.32, 0.60, 0.43, 0.37) Leg formula 4132. Coloration pattern as in male but differs in the following, spatulate scales absent near the eye region, clypeus devoid of white scales, abdomen with chevron shaped markings near the posterior white spots on the dorsum (Fig. 6). Epigyne wider with two shallow grooves placed anteriorly leading to twisted ducts reaching the spermathecae apart (Figs. 11 & 12).

Etymology: Specific name refers to the white scales along the margins of the carapace ('albo' (white) and 'terminus' (boundary) in Latin).

Type material: Holotype - 1 male; 18.viii.2013 (GPS 13.125106° N, 80.135564° E, 21.73m), **Allotype:** 2 females; 18.viii.2013, Coll. John Caleb T.D and Barnaba Thomas, GPS data (same as holotype).

Type Locality: South India, Chennai, Thirumullaivoyal, Manigantapuram.

Distribution: Known heretofore from Chennai, S. India.

Diagnosis: Specimen can be distinguished from other congeners by the shape of embolus, retro lateral tibial apophysis (Figs. 9 & 10) and dorsal pattern on the abdomen with white dots on both sexes (Figs. 1 & 6) females by wider epigyne, shape of spermathecae which are elongated, almost tubular and twisted (Figs. 11 & 12).

Natural History: Found near the scrub regions adjacent to Araabath Lake building retreats among leaves of thorny plants.

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LITERATURE CITED

Keswani, S., Hadole, P. & Rajoria, A. 2012. Checklist of Spiders (Arachnida:Araneae) from India-2012. Indian Journal of Arachnology, 1 (1): 1-129.

Maddison, W. P., Bodner, M. R. & Needham, K. M. 2008. Salticid spider phylogeny revisited, with the discovery of a large Australasian clade (Araneae: Salticidae). Zootaxa, 1893: 49-64.

Platnick, N. I. 2014. The world spider catalog, version 14.5. American Museum of Natural History, online at http://research.amnh.org/iz/spiders/catalog/INTRO1.html (Accessed on 10th January 2014).

Prószyński, J. 2013. Salticidae (Araneae) of the world. http://salticidae.org/salticid/main.htm. (Accessed on 27th December 2013).

Weslowska, W. 2010. A new species of Phintella from Angola (Araneae: Salticidae). Genus, 21 (1): 111-114.

Weslowska, W. & Wisniewski, K. 2013. New species of *Phintella* from West Africa (Araneae: Salticidae: Heliophaninae). Genus, 24 (2): 247-250.

Zabka, M. 2012. *Phlegra* Simon, 1876, *Phintella* Strand 1906 and *Yamangalea* Maddison, 2009 (Arachnida: Araneae: Salticidae)- new species and new generic records for Australia. Zootaxa, 3176: 61-68.



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Figures 1-12: *Phintella alboterminus* sp. nov., 1. Dorsal view of male, 2. Lateral view, 3 and 4. Front view, 5. Chelicerae, labium and endites, 6. Dorsal view of female, 7. Lateral view, 8. Front view, 9. Palp ventral view, 10. Palp retrolateral view, 11. Epigyne, 12. Internal view. Scale bars: Figs. 9-12, 0.05 mm.