

## New species and records in the genus *Phintella* Strand, 1906 (Araneae: Salticidae: Chrysillini) from India

## Новые виды и находки в роде *Phintella* Strand, 1906 (Araneae: Salticidae: Chrysillini) из Индии

Puthoor Pattammal Sudhin<sup>1</sup>, Souvik Sen<sup>1\*</sup>, John T.D. Caleb<sup>2</sup>  
Путор Паттамал Судхин<sup>1</sup>, Совик Сен<sup>1\*</sup>, Джон Т.Д. Калев<sup>2</sup>

<sup>1</sup> Zoological Survey of India, Prani Vigyan Bhawan, M-Block, New Alipore, Kolkata – 700053, West Bengal, India.

<sup>2</sup> Entomology Research Institute, Loyola College (Autonomous), Chennai – 600034, Tamil Nadu, India.

\* Corresponding author. E-mail: sensouvik07@gmail.com

KEY WORDS: Aranei, description, jumping spider, species discovery, Karnataka, Tamil Nadu, taxonomy.

КЛЮЧЕВЫЕ СЛОВА: Aranei, описание, паук-скакунчик, видовое разнообразие, Карнатака, Тамил-над, таксономия.

**ABSTRACT.** Two new *Phintella* species from India, *P. dhritiae* sp.n. (♂♀) and *P. platnicki* sp.n. (♂), are described and illustrated in detail. New distributional records for three species from India — *P. accentifera* (Simon, 1901), *P. debilis* (Thorell, 1891) and *P. vittata* (C.L. Koch, 1846) — are also provided, and the geographic distribution of the genus in India is also mapped.

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**РЕЗЮМЕ.** Два новых вида *Phintella* из Индии, *P. dhritiae* sp.n. (♂♀) и *P. platnicki* sp.n. (♂), детально описаны и иллюстрированы. Даны новые находки еще трёх видов из Индии — *P. accentifera* (Simon, 1901), *P. debilis* (Thorell, 1891) и *P. vittata* (C.L. Koch, 1846), а также дана карта географического распространения рода в Индии.

### Introduction

The jumping spider genus *Phintella* Strand, 1906 was established in 1906, with *Telamonia bifurcilinea* Bösenberg et Strand, 1906 as its type species. Members of this genus are small and colourful spiders, mainly distributed in the Oriental and Palaearctic Regions [WSC, 2022]. Currently, 64 species of *Phintella* are known, of which 12 species are reported from India (Map) [Caleb, Sankaran, 2022; WSC, 2022]. While studying the *Phintella* specimens collected during recent surveys across various locations in India and deposited in the National Zoological Collections, Zoological Survey of India, Kolkata, we have recognized two new species. Thus, the present paper is aimed to provide: (1) descriptions of two new species, *P. dhriti-*

*ae* sp.n. and *P. platnicki* sp.n. from Karnataka and Tamil Nadu states of southern India respectively, and (2) updated faunistic records of three other congeners from India.

### Materials and methods

A total of 120 *Phintella* specimens (33♂♂ and 87♀♀) preserved in 70% ethanol were studied and observed under a Leica M205A stereozoom microscope. All measurements are given in mm. Lengths of pedipalp and leg segments are given as follows: total [femur, patella, tibia, metatarsus (except for pedipalp), tarsus]. The micrographic images were captured with a Leica DFC4500 camera and processed using extended focus montage LAS software (version 4.1.2). The description standard and style follows Sudhin *et al.* [2019] and leg spination follows Bosselaers & Jocqué [2000]. Distribution maps were prepared using the online mapping software SimpleMappr [Shorthouse, 2010]. The specimens are kept in the National Zoological Collections of the Zoological Survey of India (NZC-ZSI), Kolkata, India.

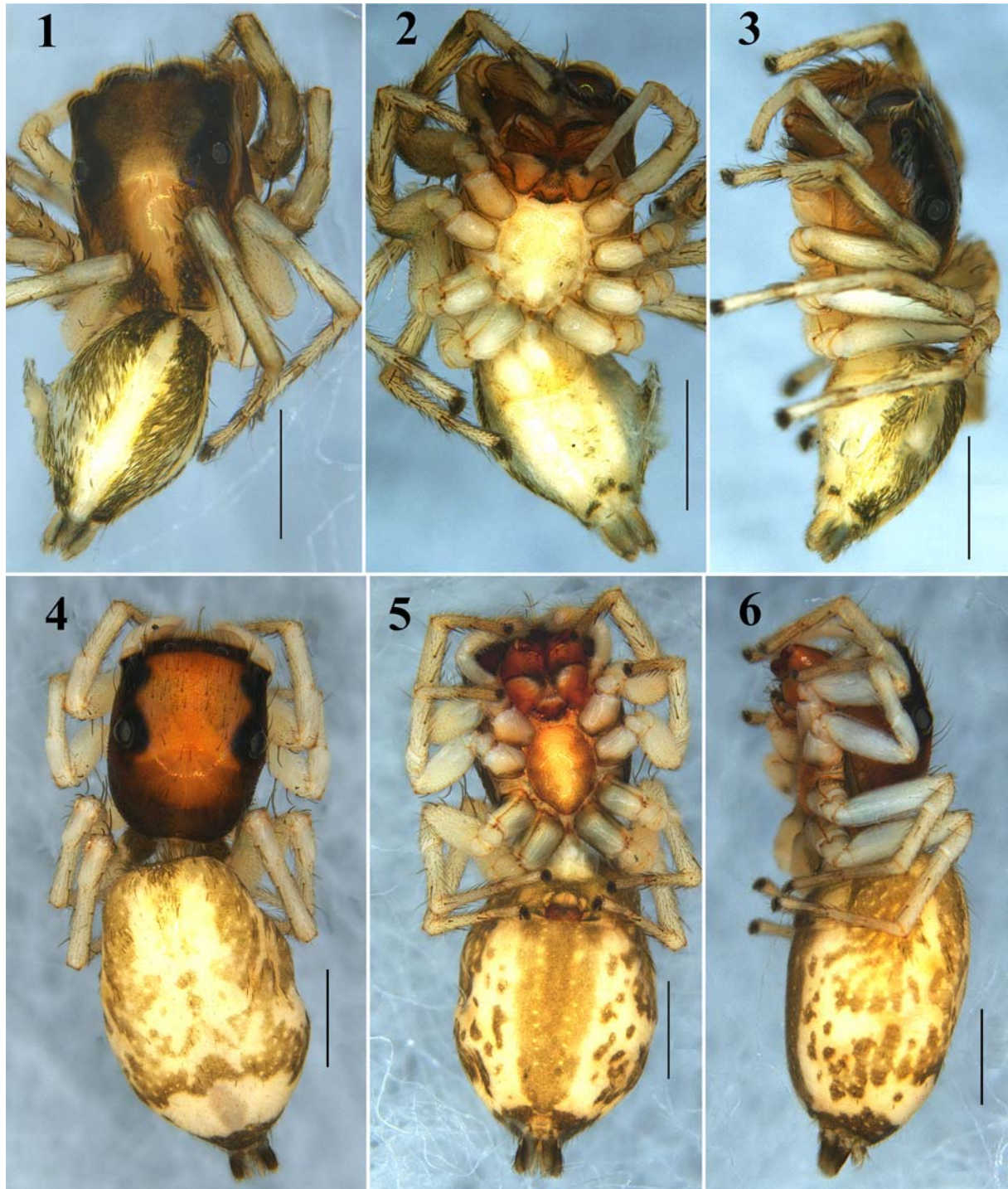
Abbreviations used in the text and figures are as follows: ALE — anterior lateral eye, AME — anterior median eye, C — cymbium, CD — copulatory duct, CO — copulatory opening, do — dorsal, E — embolus, FD — fertilization duct, pl — prolateral, PLE — posterior lateral eye, PME — posterior median eye, plv — prolateral ventral, rl — retrolateral, RTA — retrolateral tibial apophysis, rlv — retrolateral ventral, v — ventral. WLS — Wildlife Sanctuary.

### Taxonomy

#### *Phintella* Strand, 1906

TYPE SPECIES: *Telamonia bifurcilinea* Bösenberg et Strand, 1906.

DEFINITION. The members of *Phintella* are small/medium-sized, colourful spiders, usually covered with metallic iridescent scales [Žabka, 2012; Luong *et al.*, 2016]. Carapace somewhat rounded or oval, relatively high with distinct-



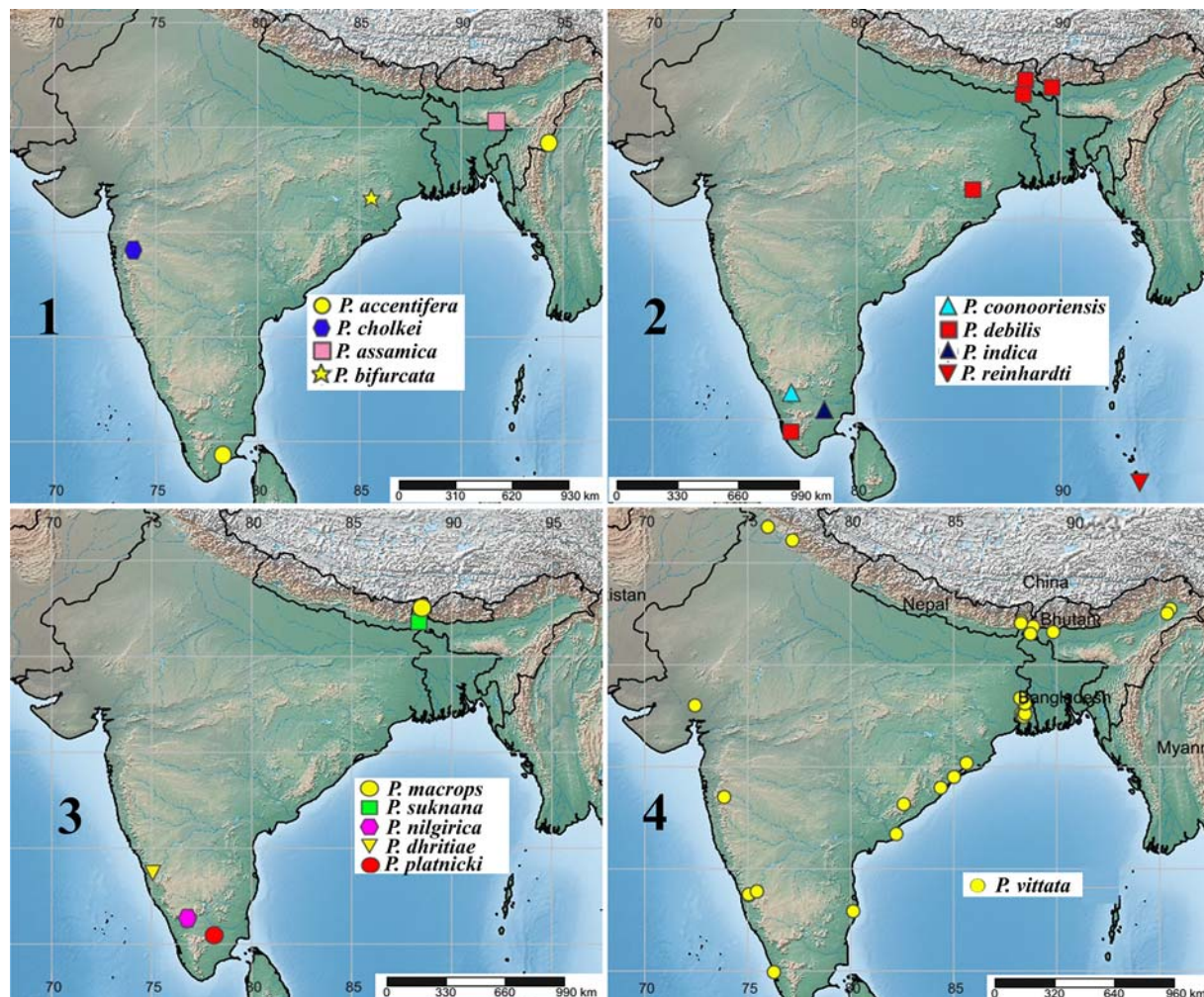
Figs 1–6. General appearance of *Phintella dhritiae* sp.n., holotype male (1–3), paratype female (4–6): 1, 4 — dorsal view; 2, 5 — ventral view; 3, 6 — lateral view. Scale bars: 1 mm.

Рис. 1–6. Общий вид *Phintella dhritiae* sp.n., голотип самец (1–3), паратип самка (4–6): 1, 4 — вид сверху; 2, 5 — вид снизу; 3, 6 — вид сбоку. Масштаб: 1 мм.

tive posterior slope. Chelicerae usually unidentate, sometimes with two promarginal and one retromarginal teeth. Abdomen ovoid or elongate, usually with pale and dark horizontal bands, or sometimes pale with grey linear patterns composed of recumbent scales or setae [Freudenschuss, Seiter, 2016]. Male palp simple, almost uniform in

the genus. Tegulum with a conspicuous retrolateral shoulder, a prominent posterior lobe and a small retrolateral tegular bump; the short embolus sitting atop the prolateral tegular extension, mostly with a lamellar process beneath; RTA small to moderate in size, usually single, sometimes bifurcated [Kanesharatnam, Benjamin, 2019; Prajapati *et al.*,





Maps 1–4. Collecting localities of the *Phintella* species in India.  
Карты 1–4. Точки находок видов *Phintella* с Индии.

2021]. Epigyne simple, sometimes with a scapum or posterior pockets; copulatory ducts usually not twisted, variable in length; spermathecae rounded in most species [Žabka, 2012; Prajapati *et al.*, 2021]; fertilization ducts positioned at anterior region of spermathecae.

*Phintella dhritiae* sp.n.  
Figs 1–15, Map 3.

TYPE. HOLOTYPE ♂ (NZC-ZSI-7676/18), INDIA, Karnataka, Shimoga, Mookambika WLS (13°41'11.92"N, 75°04'7.74"E), 626 m a.s.l., 16.12.2021, S. Sen. — PARATYPE: INDIA: 1♀ (NZC-ZSI-7677/18), together with the holotype.

ETYMOLOGY. The specific epithet is a patronym honouring Dr Dhriti Banerjee, the first lady Director of the Zoological Survey of India, Kolkata.

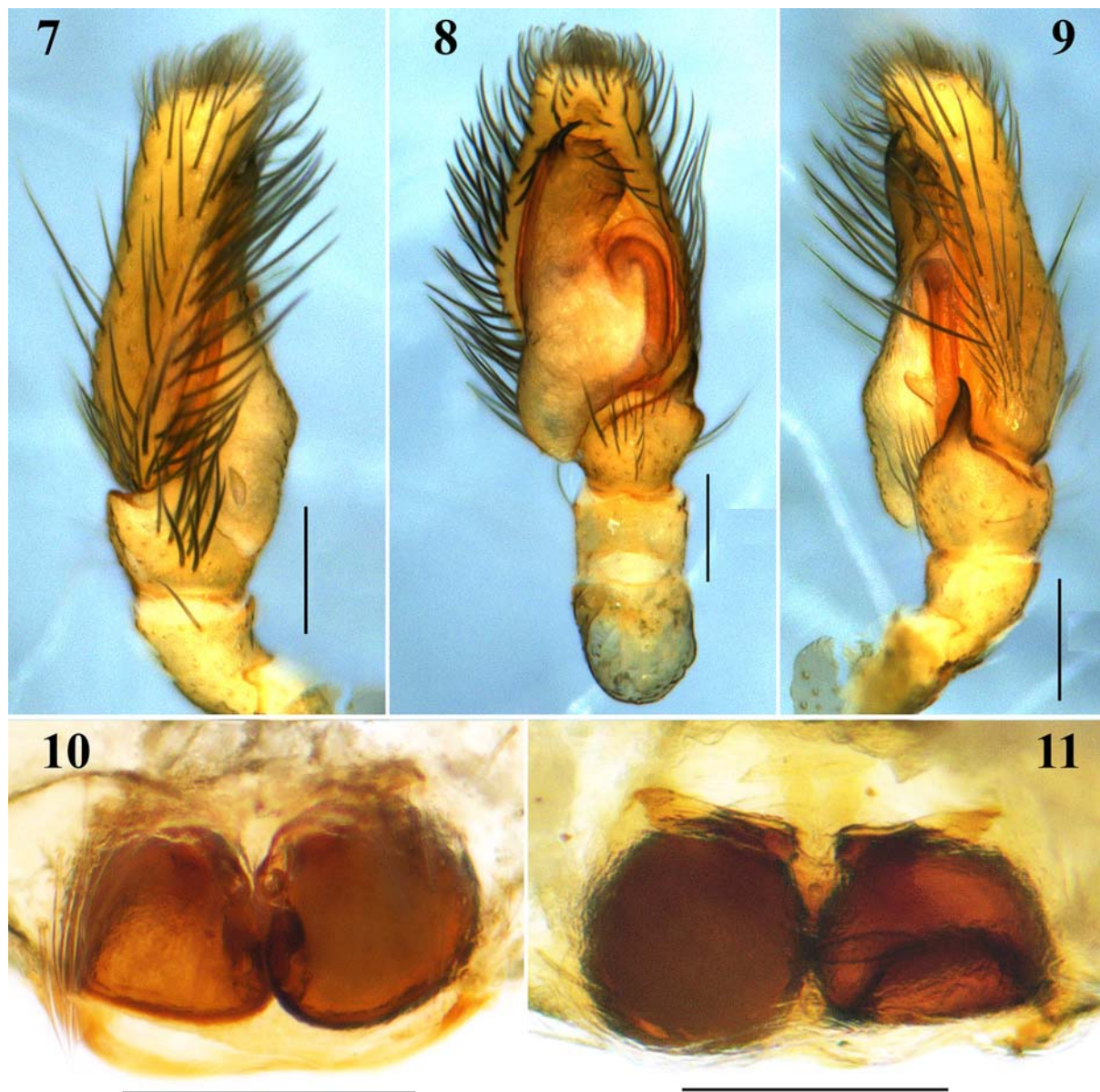
DIAGNOSIS. In the palpal morphology, the male of *P. dhritiae* sp.n. resembles that of *P. aequipeiformis* Žabka, 1985, but can be distinguished by the following combination of characters: palpal tibia wider than long (longer than wide in *P. aequipeiformis*); chelicerae short, not diverging, retromargin with a single tooth (long, diverging, promargin with one and retromargin with two teeth in *P. aequipeiformis*); carapace pale yellow, dorsally with two black stripes

(mainly black, with white patches and stripes in *P. aequipeiformis*); abdomen creamy-white, with two longitudinal black stripes (mainly black, medially with white transverse band in *P. aequipeiformis*). The female can be distinguished from those of all other *Phintella* species by the highly sclerotized bowling pin-like copulatory ducts, with small rounded copulatory openings lying along the middle line, near the anterior half of spermathecae (cf. Figs 1–3, 8–10, 12–14 with figs 422–425 in Žabka [1985], figs 3A, G, I, 4A–E in Luong *et al.* [2016], and compare illustrations in Metzner [2022]). See also comments below under ‘Diagnosis’ of *P. platnicki* sp.n.

DISTRIBUTION. The type locality only (Map 3).

DESCRIPTION. MALE (Figs 1–3, 7–9, 12–13). Measurements: body length 3.84. Carapace length 1.84, width 1.27. Abdomen length 1.86, width 1.11. Ocular area length 0.76, width 1.23. Eye diameters: AME 0.36, ALE 0.21, PME 0.05, PLE 0.13. Eye inter distances: AME–ALE 0.02, PME–PME 0.60, ALE–ALE 0.74, PME–PLE 0.15, PLE–PLE 0.98, ALE–PLE 0.43, AME–AME 0.03. Clypeus height 0.08. Length of chelicera 0.42. Measurement of palp and legs: palp 1.34 [0.47, 0.17, 0.14, 0.56], leg I 2.75 [0.84, 0.38, 0.63, 0.49, 0.41], II 2.56 [0.85, 0.32, 0.54, 0.45, 0.40], III 3.04 [0.93, 0.35, 0.61, 0.71, 0.44], IV 3.45 [1.10, 0.36, 0.73, 0.80, 0.46]. Leg formula: 4312. Leg spination: femur





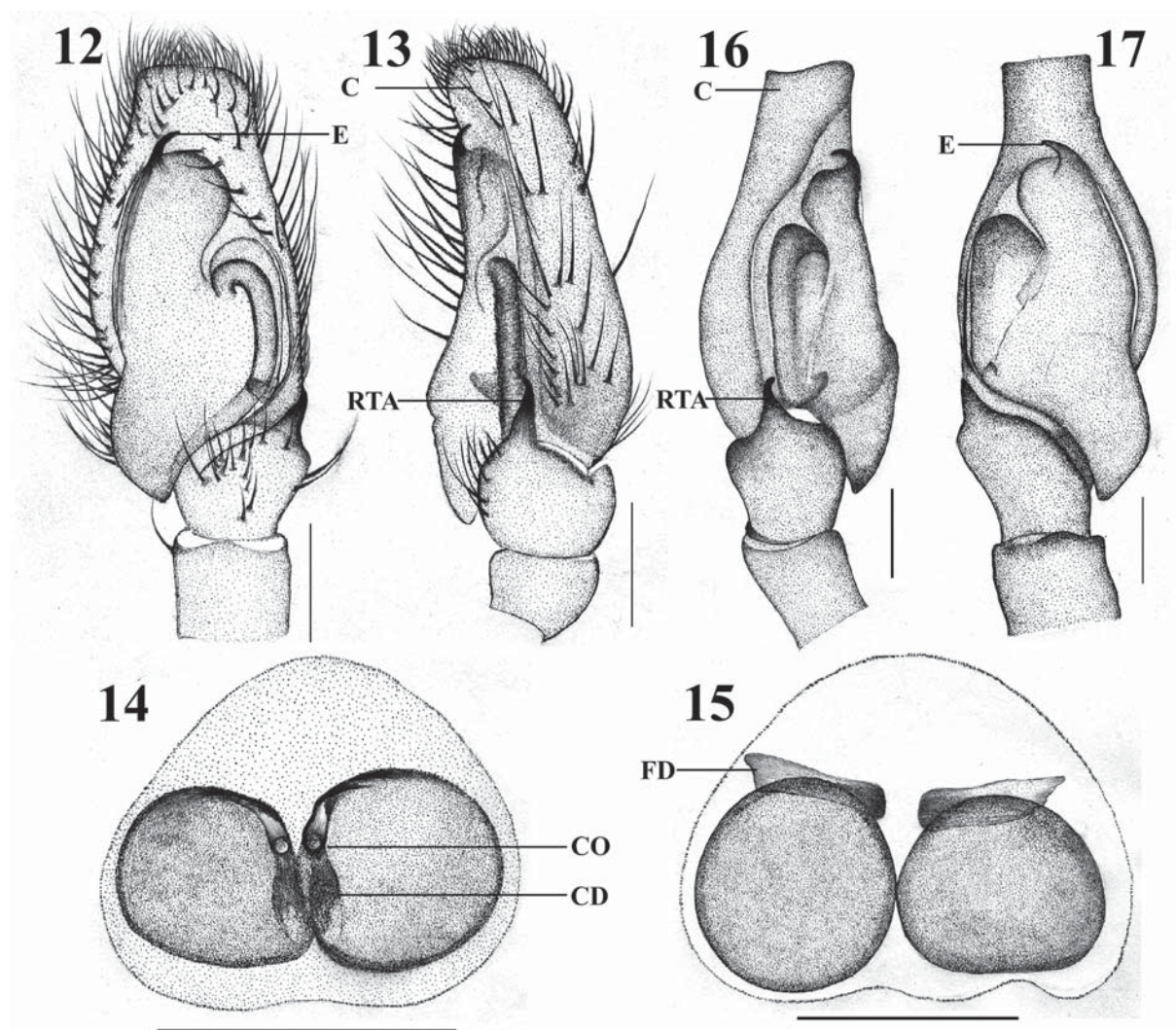
Figs 7–11. Copulatory organs of *Phintella dhritiae* sp.n., holotype male (7–9), paratype female (10, 11): 7 — left male palp, prolateral view; 8 — same, ventral view, 9 — same, retrolateral view; 10 — epigyne, ventral view; 11 — vulva, dorsal view. Scale bars: 0.2 mm.

Рис. 7–11. Копулятивные органы *Phintella dhritiae* sp.n., голотип-самец (7–9), паратип-самка (10, 11): 7 — левая пальпа самца, вид спереди-сбоку; 8 — то же, вид снизу, 9 — то же, вид сзади-сбоку; 10 — эпигина, вид снизу; 11 — вульва, вид сверху. Масштаб: 0,2 мм.

I–II, IV pl 1 rl 1 do 3, III pl 1 rl 2 do 3; patella I–IV rl 1; tibia I plv 4 rlv 4, II pl 2 rl 3 plv 3 rlv 3, III pl 2 rl 2 plv 2 rlv 1, IV pl 2 rl 3 plv 2 rlv 2; metatarsus I pl 1 rl 1 plv 2 rlv 2, II pl 2 rl 2 plv 2 rlv 2, III pl 2 rl 2 do 1 plv 2 rlv 2, IV pl 3 rl 3 plv 1 rlv 1; tarsus I–IV spineless. General appearance as in Figs 1–3. Small spider. Carapace high, slightly sloping posteriorly, pale yellow, laterally with several dark brown setae forming a brown band, and dorsally with two black stripes stretching from each posterior lateral eye to posterior end (Fig. 1). Eye field light brown, darker around the eyes, anterior median eyes surrounded by white orbital setae (Fig. 1). Clypeus low, light yellowish brown, covered with white hairs. Chelicerae short, light yellowish brown, dorsal region light brown,

retromargin with a small single tooth. Fangs short, pale yellow. Endites pale yellow, scopulate, margins with narrow brown lines (Fig. 2). Labium light yellowish brown, with paler tip, distally with brown setae (Fig. 2). Sternum creamy-white, nearly oval, anteriorly flat, covered with short white hairs (Fig. 2). Legs pale white, legs I and II with black annulations on femora, patellae, and tibiae (Figs 1–3). Abdomen small, nearly oval, creamy-white, covered with brown hairs, dorso-laterally with two broad longitudinal brown stripes formed of brown scale-like hairs, extending along entire length of abdomen (Fig. 1); lateral abdomen with similar bands (Fig. 3). Ventral abdomen pale white, posterior tip with three irregular black patches (Fig. 2). Spinnerets





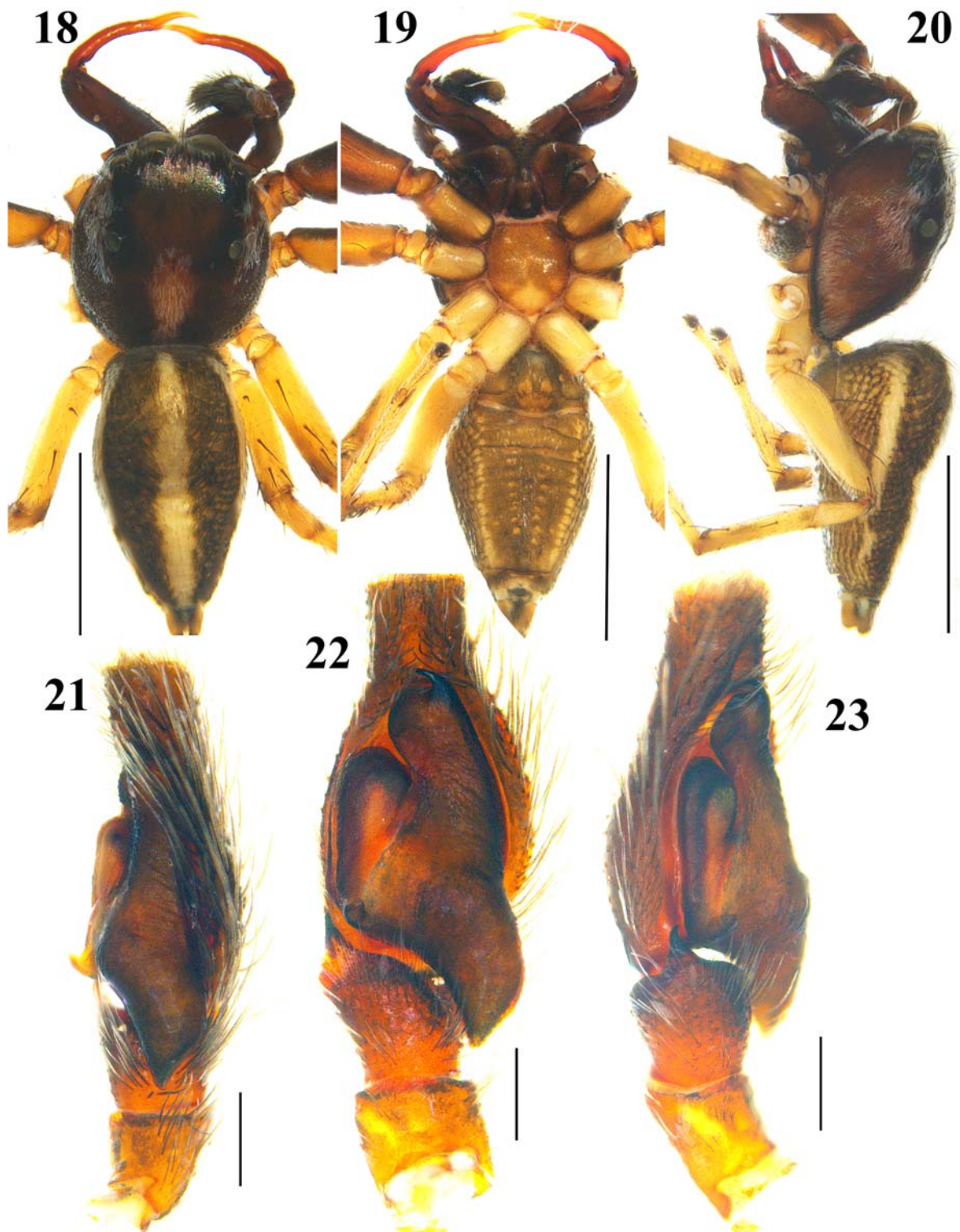
Figs 12–17. Copulatory organs of *Phintella dhrithiae* sp.n. (12–15), holotype male (12, 13), paratype female (14, 15), and *Phintella platnicki* sp.n., holotype male (16–17): 12 — left male palp, ventral view, 13 — same, retrolateral view; 14 — epigyne, ventral view; 15 — vulva, dorsal view; 16 — right male palp, retrolateral view, 17 — same, ventral view. Scale bars: 0.2 mm.

Рис. 12–17. Копулятивные органы *Phintella dhrithiae* sp.n. (12–15), голотип-самец (12, 13), паратип-самка (14, 15), и *Phintella platnicki* sp.n., голотип-самец (16–17): 12 — левая пальпа самца, вид снизу, 13 — то же, вид сзади-сбоку; 14 — эпигина, вид снизу; 15 — вульва, вид сверху; 16 — правая пальпа самца, вид сзади-сбоку, 17 — то же, вид снизу. Масштаб: 0,2 мм.

light greyish brown, posterior one paler. Palp pale yellow, covered with hairs; RTA short, thin, anteriorly directed, broad basally, narrowing distally, tip pointed slightly bent ventrally; cymbium elongate oval, covered with long thick brown hairs; tegulum bi-lobed, triangular with well-developed posterior lobe, retrolateral corner of anterior part of tegulum rounded; tegulum with a conspicuous retrolateral shoulder, sperm duct visible at this shoulder; embolus short, situated anterior to bulbus, claw-like with narrowing tip directed at 2 o'clock position in ventral view (Figs 7–9, 12–13).

**FEMALE** (Figs 4–6, 10–11, 14–15). Measurements: body length 5.39. Carapace length 2.07, width 1.68. Abdomen length 3.18, width 2.03. Ocular area length 1.16, width 1.53. Eye diameters: AME 0.43, ALE 0.19, PME 0.03, PLE 0.24. Eye inter distances: AME–ALE 0.03, PME–PME 1.03, ALE–ALE 0.87, PME–PLE 0.13, PLE–PLE 0.96, ALE–PLE 0.44, AME–AME 0.01. Clypeus height 0.10. Length of chelicera

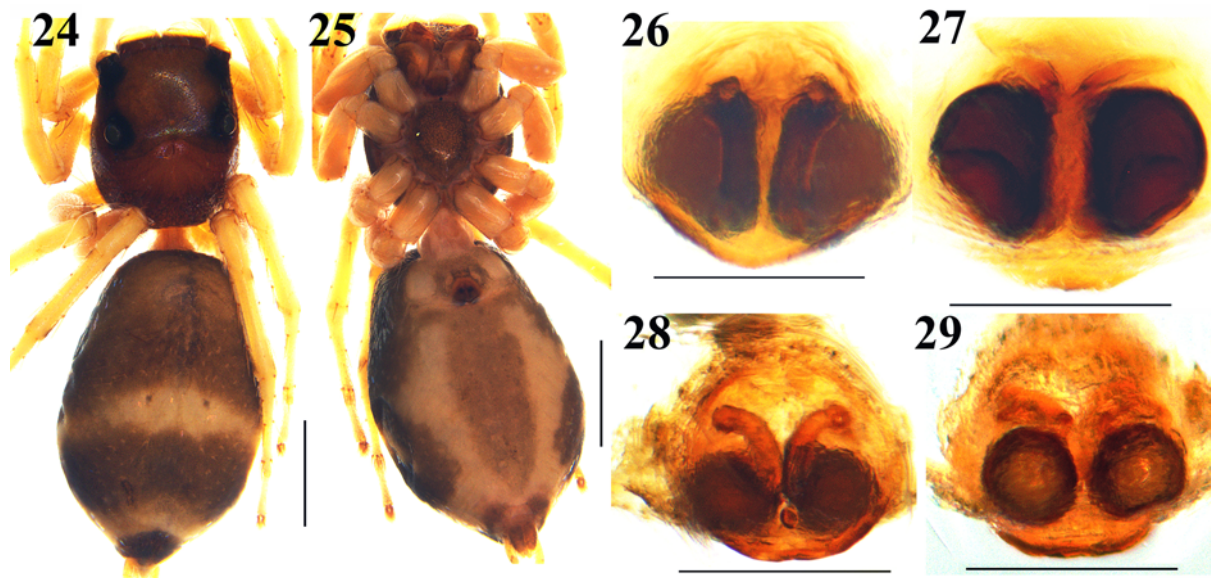
0.63. Measurement of palp and legs: palp 1.23 [0.44, 0.20, 0.25, 0.34], leg I 2.44 [0.77, 0.36, 0.58, 0.40, 0.33], II 2.25 [0.75, 0.35, 0.46, 0.35, 0.34], III 2.76 [0.84, 0.34, 0.54, 0.61, 0.43], IV 3.29 [1.01, 0.38, 0.74, 0.72, 0.44]. Leg formula: 4312. Leg spination: femur I pl 1 do 3, II–IV pl 1 rl 1 do 3, III pl 1 rl 2 do 3; patella III–IV rl 1; tibia I plv 3 rlv 2, II rlv 2, III pl 2 rl 2, IV pl 2 rl 3 v 1; metatarsus I plv 2 rlv 2, II pl 1 rl 1 plv 2 rlv 2, III pl 1 rl 2 do 1 plv 1 rlv 1, IV pl 2 rl 2 do 1 plv 1 rlv 1; tarsus I–IV spineless. Female slightly elongate and robust than male. Carapace light yellowish brown; eye field reddish yellow (Fig. 4). Chelicerae light reddish yellow, retromargin with one and promargin with two teeth (Figs 5–6). Endites light reddish yellow (Fig. 5). Labium light brown (Fig. 5). Sternum light yellow, lateral region yellowish brown (Fig. 5). Abdomen creamy-white, laterally with a pair of large discontinuous irregular black stripes reaching to the abdomen's posterior half and joined transversely by two chevron shaped patches; abdomen medi-



Figs 18–23. General appearance and copulatory organs of *Phintella platnicki* sp.n.: 18 — holotype male dorsal view; 19 — same, ventral view; 20 — same, lateral view; 21 — right male palp, prolateral view; 22 — same, ventral view, 23 — same, retrolateral view. Scale bars: 2 mm (18–20), 0.2 mm (21–23).

Рис. 18–23. Общий вид и копулятивные органы *Phintella platnicki* sp.n.: 18 — голотип-самец, вид сверху; 19 — то же, вид снизу; 20 — то же, вид сбоку; 21 — правая пальпа самца, вид спереди-сбоку; 22 — то же, вид снизу; 23 — то же, вид сбоку-сзади. Масштаб: 2 мм (18–20), 0,2 мм (21–23).





Figs 24–29. General appearance and copulatory organs of *Phintella accentifera* (Simon, 1901) (24–27), and copulatory organs of *Phintella debilis* (Thorell, 1891) (28–29): 24 — female dorsal view; 25 — same, ventral view; 26, 28 — epigyne, ventral view; 27, 29 — vulva, dorsal view. Scale bars: 1 mm (24–25), 0.2 mm (26–29).

Рис. 24–29. Общий вид и копулятивные органы *Phintella accentifera* (Simon, 1901) (24–27), и копулятивные органы *Phintella debilis* (Thorell, 1891) (28–29): 24 — самка, вид сверху; 25 — то же, вид снизу; 26, 28 — эпигина, вид снизу; 27, 29 — вульва, вид сверху. Масштаб: 1 мм (24–25), 0,2 мм (26–29).

ally with a discontinuous longitudinal stripe extends to the chevron shaped patch, laterally with discontinuous irregular brown patches (Figs 4, 6); posterior region black; venter yellow with a medial broad light brown stripe, lateral sides with brown irregular patches and spots (Fig. 5). Spinnerets dark brown. Epigyne simple, covered with light brown hairs; copulatory openings lie close together along the median axis; copulatory ducts bowling pin-shaped, highly sclerotized, entering posteriorly into spermathecae; spermathecae nearly round, touching each other; fertilization ducts long, flat, oriented laterally, positioned at anterior region of spermathecae (Figs 10–11, 14–15).

#### *Phintella platnicki* sp.n.

Figs 16–23, Map 3.

TYPE. HOLOTYPE ♂ (NZC-ZSI-7352/18), INDIA, Tamil Nadu, Salem, Yercaud (10°46'13.95"N, 78°12'6.37"E), 133 m a.s.l., 18.10.2019, J. Thilak.

ETYMOLOGY. The specific epithet is a patronym honouring the late Dr Norman Platnick (1951–2020), for his tremendous contributions to the field of arachnology.

DIAGNOSIS. The male of *P. platnicki* sp.n. is most similar to that of *P. dhritiae* sp.n., but can be separated by the following combination of characters: RTA short, hook-like in retrolateral view (relatively elongate, directed anterior in *P. dhritiae* sp.n.); chelicerae long and diverging (short and not diverging in *P. dhritiae* sp.n.); carapace nearly round, dark reddish brown, dorsally with a light yellowish oval patch (elongated, pale yellowish, with two black stripes in *P. dhritiae* sp.n.) (cf. Figs 16–23 with Figs 1–3, 7–9, 12–13).

DISTRIBUTION. The type locality only (Map 3).

DESCRIPTION. MALE (Figs 16–23). Measurements: Body length 5.32. Carapace length 2.24, width 2.12. Abdomen length 3.04, width 1.64. Ocular area length 1.84, width 1.50. Eye diameters: AME 0.51, ALE 0.23, PME 0.07, PLE

0.24. Eye inter distances: AME–AME 0.04, ALE–AME 0.04, ALE–ALE 1.14, ALE–PME 0.33, PLE–PLE 1.17, PME–PME 1.21, PME–PLE 0.29. Measurements of palp and legs: palp 2.16 [0.76, 0.37, 0.25, 0.78], leg I 6.55 [1.98, 1.04, 1.72, 1.15, 0.66], II 5.08 [1.65, 0.66, 1.28, 0.97, 0.52], III 5.36 [1.67, 0.63, 1.11, 1.30, 0.65], IV 5.85 [1.84, 0.55, 1.37, 1.50, 0.59]. Leg formula: 1432. Spination. Palp: femur do 3. Legs: femur I–II pl 1 do 2, III pl 1 do 1, IV pl 1 rl 1 do 1; patella III–IV rl 1; tibia I plv 4 rlv 4, II pl 3 rl 2 plv 2 rlv 3, III–IV pl 2 rl 3 v 1 plv 2 rlv 1; metatarsus I plv 2 rlv 2, II pl 1 rl 1 do 1 v 1 plv 2 rlv 2, III–IV pl 2 rl 2 do 1 v 1 plv 1 rlv 1; tarsus I–IV spineless. Carapace nearly round, high, slightly sloping posteriorly, dark reddish brown, covered with white hairs, margin of carapace black; thoracic region medially with a pale-yellow oval patch covered by white hairs; eye bases black, eyes surrounded with short white orbital setae, a row of white setae present over AMEs (Fig. 18). Clypeus short, dark brown, posterior margin with a row of short white setae. Chelicerae long, subvertical, diverging, reddish brown, retromargin with a single tooth (Figs 18–20). Endites light brown, paler marginally, scopulate (Fig. 19). Labium brown, distally pale, covered with setae (Fig. 19). Sternum oval, truncated anteriorly, yellowish brown, posterior tip more yellow (Fig. 19). Abdomen elongate, narrowing posteriorly, brown, with a whitish yellow longitudinal median and lateral bands; lateral region with black and yellow streaks (Figs 18, 20); venter light brown medially with a pair of dotted lines (Fig. 19). Spinnerets light brown, covered with brown hairs. Leg I long, greyish brown, proximal region of tibia, metatarsus, and tarsus pale yellow; femur II with longitudinal brown bands on either side laterally, other leg segments pale yellow, apical section brown; all femora ventrally with dense hairs. Palpal segments light brown; tibia longer than wide covered with long brown hairs and short white setae; RTA short, hook-like with narrowing curved tip, directed ventrally in retrolateral view; cymbium

elongate, distally flat, densely covered with brown hairs, basally with short white setae; tegulum bi-lobed, triangular with well-developed posterior lobe, retrolateral corner of anterior part of bulbus rounded; embolus claw-like situated anteriorly on bulbus, with narrowing tip directed at 10 o'clock position in ventral view (Figs 16–17, 21–23).

FEMALE. Unknown

*Phintella accentifera* (Simon, 1901)

Figs 24–27, Map 1.

*Telamonia accentifera* Simon, 1901: 548.

*Phintella accentifera*: Zabka, 1985: 428, figs 430–434, 452.

For a complete list of taxonomic references see WSC [2022].

MATERIAL. INDIA: 2♀♀ (NZC-ZSI-6946/18), Manipur, Moreh, west bank of Lacro River, 13.4.1992, A.K. Hazra.

DISTRIBUTION. India, China, Vietnam [WSC, 2022]. India: Tamil Nadu [Simon, 1901], Manipur (new locality record) (Map 1).

*Phintella debilis* (Thorell, 1891)

Figs 28–29, Map 2.

*Chrysilla debilis* Thorell, 1891: 115.

*Phintella debilis*: Zabka, 1985: 425, figs 408–419, 448; Prószyński, 1992: 198, figs 141–145.

For a complete list of taxonomic references see WSC [2022].

MATERIAL. INDIA: 1♀ (NZC-ZSI-7133/18), West Bengal, Darjeeling, Mahananda WLS, 9.11.2017, M.E. Hassan; 2♂♂ (NZC-ZSI-7450/18), Kerala, Pathanamthitta, Ranni forest division, 30.10.2021, P.M. Sureshan.

DISTRIBUTION. India to Taiwan, Indonesia (Java) [WSC, 2022]. India: Kerala (new locality record), Odisha, West Bengal [Prószyński, 1992] (Map 2).

*Phintella vittata* (C. L. Koch, 1846)

Map 4.

*Plexippus vittatus* C.L. Koch, 1846: 125, fig. 1185.

*Phintella vittata*: Zabka, 1985: 429, figs 435–441, 453; Kane-sharatnam, Benjamin, 2019: 70, figs 29E–H, 34A–F, 35A–E, 36A–D; Tyagi *et al.*, 2019: Supplement, figs S2.54, S3.27–30.

For a complete list of taxonomic references see WSC [2022].

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DISTRIBUTION. India to China and the Philippines [WSC, 2022]. India: Goa, Sikkim, Tamil Nadu, West Bengal [Caleb, 2019, 2020], new locality records from Andhra Pradesh, Assam, Himachal Pradesh, Karnataka and Odisha (Map 4).

## Discussion

Members of the salticid tribe Chrysillini are generally small to medium-sized, leaf-dwelling spiders, often brightly coloured with delicate legs [Maddison, 2015]. The tribe currently comprises of 592 nominal species in 31 genera and is ubiquitous throughout the Old World [Maddison, 2015; WSC, 2022]. The Indian chrysilline diversity is currently represented by 53 species in 16 genera [Caleb, Sankaran, 2022; WSC, 2022]. The most speciose genus in this tribe is *Phintella*, which includes 64 species worldwide, of which 12 species occur in India [Caleb, Sankaran, 2022]. The present paper has added two new species to the genus and provided updated faunistic records for three other congeners: viz., *P. accentifera*, *P. debilis* and *P. vittata*. The distribution of Indian *Phintella* species is largely restricted to the eastern and southern regions, with the exception of *P. cholkei* and *P. vittata*, both of which occur in the western part of India (Maps 1, 4); the latter species has been found almost throughout India, except for central regions but with a higher distribution along the eastern India (Maps 1–4). Five species including the two new species, *P. dhritiae* sp.n., *P. platnicki* sp.n., *P. coonooriensis* Prószyński, 1992, *P. nilgirica* Prószyński, 1992, and *P. indica* (Simon, 1901) are restricted to the southern part of India (Maps 2–3), while *P. assamica* Prószyński, 1992, *P. macrops* (Simon, 1901), *P. suknana* Prószyński, 1992, and *P. bifurcata* Prószyński, 1992 are restricted to the eastern part of India (Maps 1, 3). *P. accentifera* (Simon, 1901) and *P. debilis* (Thorell, 1891) occur in the southern and eastern regions of India, and *P. reinhardti* (Thorell, 1891) is restricted to the Nicobar Islands (Maps 1–2). The actual diversity and distribution of *Phintella* species in India is still unclear due to inadequate sampling. Therefore, extensive sampling should be carried out throughout India, with emphasis on taxonomic studies which will uncover the true diversity of Indian *Phintella* species.



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#### Compliance with ethical standards

**Conflict of interest:** The authors declare that they have no conflict of interest.

**Ethical approval:** No ethical issues were raised during our research.

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