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Description of a new species of *Phintella* STRAND in BÖSENBERG et STRAND, 1906 from New Caledonia (Araneae: Salticidae)

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ABSTRACT. Jumping spider genus *Phintella* STRAND in BÖSENBERG et STRAND, 1906 is for the first time reported from New Caledonia and the new species *P. caledoniensis* is described, diagnosed and illustrated.

Key words: arachnology, taxonomy, Salticidae, *Phintella*, new species, Pacific Is., New Caledonia.

INTRODUCTION

The genus *Phintella* was established by STRAND in BÖSENBERG et STRAND (1906). The type species *P. bifurcilinea* (BÖSENBERG et STRAND 1906), was originally described as *Telamonia bifurcilinea* BÖSENBERG et STRAND 1906 and revised by PRÓSZYŃSKI (1983a). The position of the genus was discussed by PRÓSZYŃSKI (1983b). The genus is placed in Heliophaninae (MADDISON 1987, MADDISON & HEDIN 2003). PLATNICK (2009) listed 40 nominal species, and PRÓSZYŃSKI (2009) 41 species. In fact these lists of species differ in as many as eight species.

Most species have been described from the Oriental Region, some are also known from the Palearctic and Afrotropical Regions. The genus has not been previously recorded from the New Caledonian archipelago. Although more than 400 salticid specimens from the New Caledonia were studied during this research, only 8 of them belong to *Phintella*. Examined specimens do not correspond with any hithero known species, however the most similar palps were found in *P. volupe* from Sri Lanka.

MATERIAL AND METHODS

The study is based on ethanol-preserved material from New Caledonia, provided by Dr Robert RAVEN (Queensland Museum, Brisbane = QM). The drawings were made using a grid system. The epigyne was removed for study and digested in 10% KOH. A Canon PowerShoot A620 digital camera, attached to a stereomicroscope and Helicon Focus software were used for photographing specimens. Measurements are given in millimetres and were taken using MultiScan software.

Abbreviations used: AEW - anterior eye width, ag - accessory glands, AME – anterior median eyes, AL - abdomen length, b - bulbus, CH - cephalothorax height, CL - cephalothorax length, co - copulatory openings, CW - cephalothorax width, EFL - eye field length, F - female, L - leg, M - male, PEW - posterior eye width, s - spermathecae, ta - tibial apophysis.

Genus *Phintella* BÖSENBERG et STRAND, 1906

Phintella BÖSENBERG et STRAND 1906: 333; PRÓSZYŃSKI 1983b: 43; BERRY et al 1996: 243. MURPHY & MURPHY 2000: 352-353.

Diagnosis (after BERRY et al. 1996): Cephalothorax broad with almost parallel sides, moderately high, eyes III at the edge of flat surface. Abdomen lower and narrower than cephalothorax, gradually tapering and pointed posteriorly. Cheliceral retromarginal tooth single. Legs long and robust; with tibia I somewhat swollen and narrowing at both ends; three pairs of ventral spines and one prolateral spine, in females these spines are much reduced in length but robust; metatarsus with two pairs of ventral spines.

***Phintella caledoniensis* n. sp.**

(Figs 1-10)

ETYMOLOGY

Named after New Caledonia, the type locality.

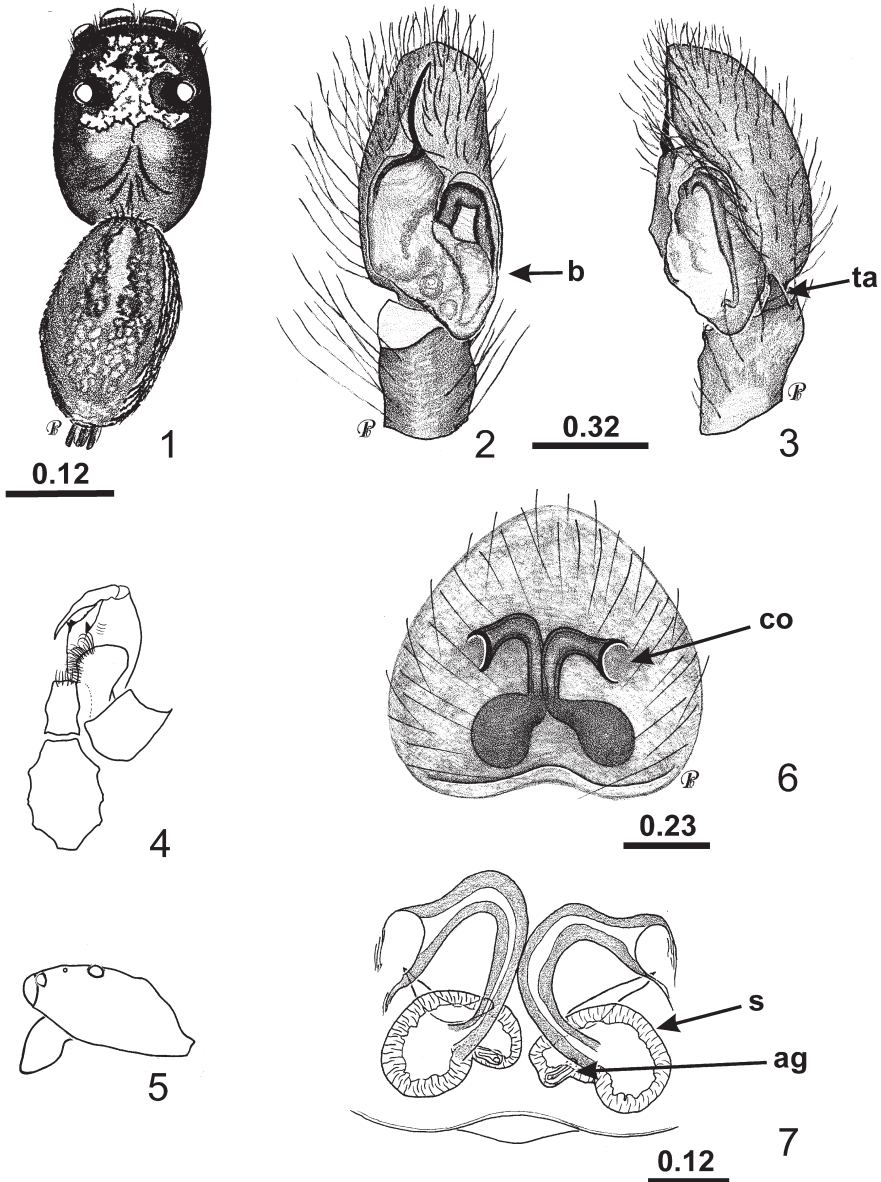
DIAGNOSIS

In comparison with the most similar *P. volupe* it can be distinguished by the shape of bulbus and shorter tibial apophysis. Female distinguishable from other members of the genus by bean-shaped spermathecae.

DESCRIPTION

Male. Holotype (figs 1-5). Cephalothorax brown with whitish patches of guanin, become visible on cephalic part. Eye field wider than long, surrounding of eyes dark-black. Fovea visible. Thorax with indistinct lines radiating from fovea. Posterior slope gentle. Sides brown. Abdomen oval, grey-brown, with dorsal scutum (fig. 1). Spinnerets grey-brown. Clypeus brown, height 12% of AME diameter. Chelicerae brown, *unidentati* (fig. 4). Maxillae and labium brown, sternum light-brown. Venter grey. Palps

light-brown. Embolus thin and long with the base located anteriorly (fig. 2). Tegulum longer than wide, with the retrolateral proximal extension. Tibia and patella light-brown, tibial apophysis short, slightly curved (fig. 3). Legs brown with lighter coxae,



1-5. *P. caledoniensis* sp. n. male: 1. dorsal view; 2. palpal organ, ventral view; 3. palpal organ, lateral view; 4. ventral part and cheliceral dentition; 5. cephalothorax, lateral view; 6-7. *P. caledoniensis* sp. n. female: 6. epigyne; 7. internal structure of epigyne. Scales as in figs

trochanteri and femora. Tarsi slightly lighter distally. Metatarsi and tibiae of the legs III and IV lighter medially. Metatarsi and tibiae of the legs I dark brown.

Measurements: CL 2.45, CW 1.66, CH 1.12, AL 2.44, AW 1.17, EFL 0.96, AEW 1.37, PEW 1.40, LI 7.10, LII 4.78, LIII 3.77, LIV 5.79.

Female. Allotype (figs. 6-10). Cephalothorax dark-brown with whitish patches of guanin, become visible on cephalic part (fig. 8). Eye field wider than long, surrounding of eyes dark-brown. Fovea visible. Thorax with indistinct lines radiating from fovea.



8-10. *P. caledoniensis* sp. n. female: 8. dorsal view, scale 1.00 mm; 9. cephalothorax, antero-lateral view; 10. cheliceral dentition

Posterior slope gentle. Sides brown. Abdomen oval, greyish, its pattern as in fig. 8. Spinnerets grey. Clypeus brown, height 16% of AME diameter (fig. 9). Chelicerae brown *unidentati* (fig. 10). Maxillae, labium and sternum brown. Venter greyish. Legs brown with lighter coxa, trochanter and femur. Copulatory openings widely separated (fig. 6). Insemination ducts long, curved. Spermathecae bean-shaped. Accessory glands as in fig. 7.

Measurements: CL 2.34, CW 1.68, CH 1.13, EFL 1.02, AEW 1.37, PEW 1.37, AL 2.49, AW 1.46, LI 4.90, LII 3.94, LIII 3.91, LIV 4.54.

MATERIAL EXAMINED

Holotype: male (QM S35674), New Caledonia: Mt. Panié, 950-1300 m alt., 14-16 May 1984, coll. MONTEITH G. B & D. COOK. Allotype: female together with holotype.

Paratype: female (QM S35652), New Caledonia: Mt. Panié, rainforest, moss, litter, 1300-1600 m alt., Berlese, 15 May 1984, coll. MONTEITH G. B & D. & COOK. 5 juv. the same data.

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