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Remarks on the genus *Corambis* Simon, 1901 (Araneae: Salticidae)

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Abstract: Type species of the genus; *Corambis insignipes* is redescribed based on a female specimen (different from that, which was examined by Zabka 1988). Its conspecific males, together with a congeneric species; *Corambis foeldvarii* sp. n. is described. These are the first detailed illustrations of the copulatory organs of the males of the genus.

Key words: Salticidae, *Corambis*, new species, New Caledonia

INTRODUCTION

The genus *Corambis* was established by Simon, in his monumental work, the *Histoire Naturelle des Araignées* (Simon 1901). He included only one species – known mainly by females and one male; "Le mâle (seul connu)" – *Corambis insignipes* (Simon, 1880) which was transferred from the genus *Hyctia* Simon, 1876 – this latter was subsequently synonymized with *Marpissa* C. L. Koch, 1846 by Prószynski (1976). Simon also figured the first leg (of the male) – at Fig. 728.

Zabka (1988) redescribed the species on the basis of a female specimen (collected in 1911, determined by Berland – definitely not the type specimen). It seems that this single adult female was the only available material he could examine, as the type specimens are probably lost. Now I had a possibility to study several specimens – previously identified to genus level by János Balogh. Here I give the completed descriptions and illustrations for both sexes of the genus.

MATERIALS AND METHODS

The material is stored in the Hungarian Natural History Museum (HNHM), Budapest (curator Sándor Mahunka). The specimens were examined with traditional methods. The left male palp was removed for study. Epigynes were cleared after dissection in methyl-salicilate. Drawings were made

by camera lucida attached to stereo- and light microscope. The description format (and abbreviations of body parts) follows the one used by Zabka (1991) (see Figs 2–4). All measurements are given in millimetres.

Abbreviations: AEW – anterior eyes width, ag – accessory gland, AL – abdomen length, c – cymbium, CH – cephalothorax height, CL – cephalothorax length, co – copulatory opening, CW – cephalothorax width, e – embolus, EFL – eye field length, f – femur, fd – fertilisation duct, id – insemination duct, m – metatarsus, pt – patella, PEW – posterior eyes width, s – spermatheca, sr – seminal reservoir, t – tibia, ta – tarsus, tg – tegulum, tf – tegular furrow, tr – trochanter.

TAXONOMY

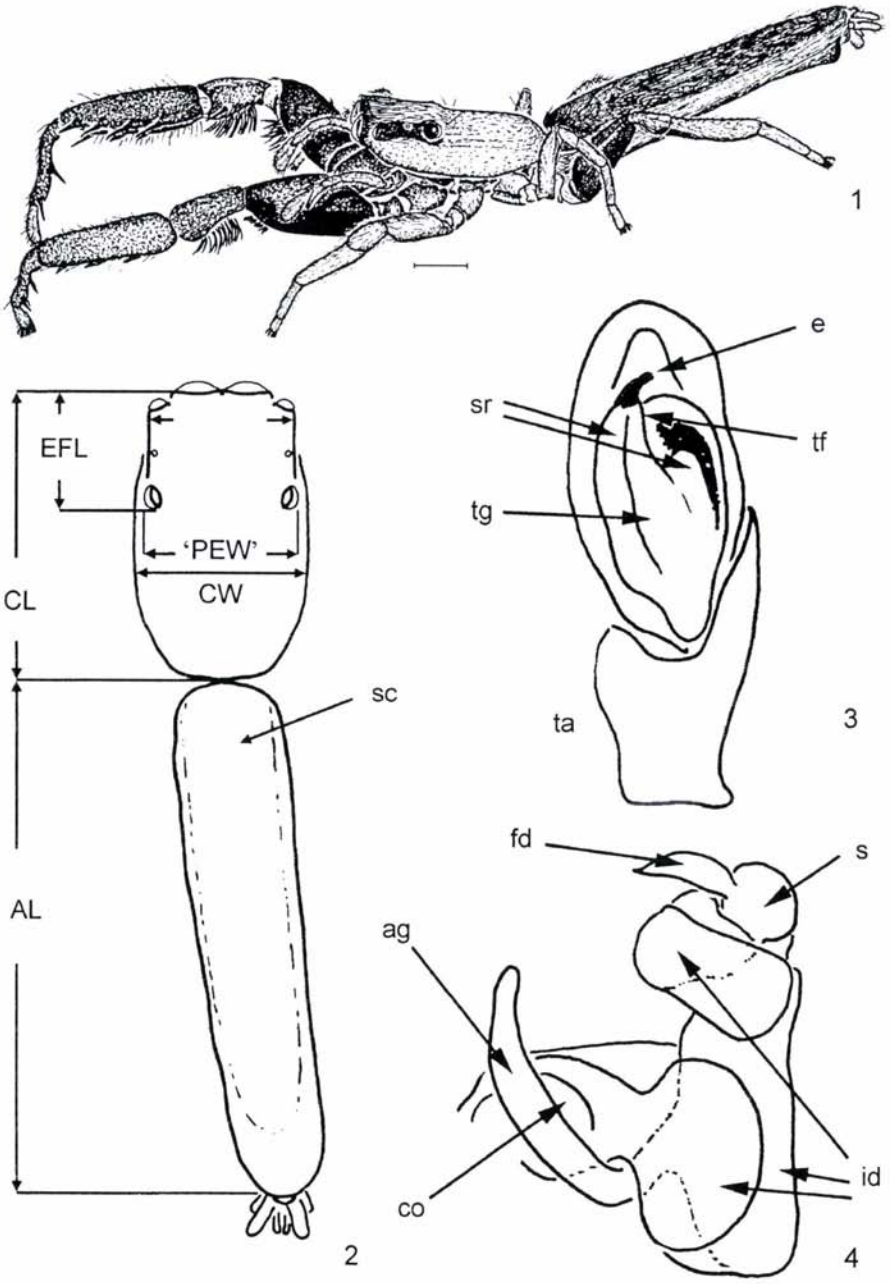
Corambis Simon, 1901

Hyctia [part] Simon 1880: 162.
Corambis Simon, 1901: 595, 596, 602, 609; Zabka 1988: 422, 443.
Type species – *Hyctia insignipes* Simon, 1880; by original designation (monotypy).

Diagnosis – The flat and elongated hairy body is characteristic (Fig. 1), males could be recognised by the elongated cymbium, and the large but simple tibial apophysis. As Simon has already pointed out, males have long and strong first legs, first femur, tibia and patella with ventral brush-like setae. Metatarsus I sinuous (more or less). Females with a characteristic epigyne; entrance ducts directed outwards. Insemination ducts short. See generalised copulatory organs at Figs 3–4.

Relationships – In general habitus (hairy, elongated, flat body) the genus resembles to the following Holarctic taxa, to which it might be related: *Hyctia* Simon, 1876; *Mendoza* Peckham et Peckham, 1894; *Marpissa* C. L. Koch, 1846. The relationships (and the status) of the above-mentioned taxa are unclear and need further examination and discussion of specialists (see Logunov 1999 and Prószynski's Internet Catalogue for details). However, *Corambis* differs from those by the orientation of the copulatory openings, which are directed outward (Fig. 16). The sperm ducts are shorter than those of the rest of the species of these taxa, and the relatively, simple male palp (Figs 13–15; 19–21) with short embolus is different as well. Unfortunately no synapomorphy has been found to support this relationship. According to the chaetotaxy of the first tibia (its relevance has not been proven yet) – all of those genera have four pairs of spines on the first tibia – it might be possible, that those genera belong the same clade as *Corambis*.

The representatives of the genus also resemble few other Australian– Oceanian genera such as *Holoplathys* Simon, 1885; *Ocrisiona* Simon, 1901; *Paraplatoides* Zabka, 1992 and others. However, *Corambis* differs from them by having four



Figs 1–4. The general of *Corambis* – 1: *C. insignipes* male habitus – 2: Dorsal view of the body – 3: Schematic drawing of a palp – 4: Scematic drawing of the female genitalia, dorsal view of the vulva. Scale: 1.0 mm

pairs of spines on the first tibia and three pairs on the second. The others have less than four pairs; they could even be missing, see Davies & Zabka (1989: 256), and have only one large tibial apophysis on the male palp (the others have two apophyses).

Description – The characters used by Simon remain valid, few changes and additions are presented. Large sized spiders, ranging from 7.5 to 12 mm in total length. Body flat and narrow. Thoracic part of cephalothorax distincly longer (about 60% of CL) than cephalic part. Fovea not visible. Abdomen elongated, with a poorly sclerotized dorsal scutum, and with a distinct and well developed ventral (apical) scutum. Clypeus narrow. Chelicerae well developed, but not robust, sometimes gracile, of "unident" pattern, with two promarginal teeth (one of them may be long and thin), and one retromarginal tooth. Maxillae and labium long, gnathocoxae with a protuberance. Carapace with whitish whiskers. Leg I the longest and strongest (slightly different among the species), with ventral brushes on the femur, patella and tibia. Brush thickest at patella. Tibia I with four pairs, metatarsus with two pairs of spines. Metatarsus sinuous. Leg II with similar spination pattern, but tibia with 3 pairs of spines (already mentioned by Simon: "*Pedes 2i paris tibia 3–3 metatarso 2–2 aculeatis*") Leg III the shortest. Leg III and IV almost without spines (only femora with few dorsal spines).

Palpal organ resembles that of *Salticus* with short embolus, and a spoon-shaped retrolateral tibial apophysis (which could be blunt or slighly pointed). Female genitalia resemble that of *Mendoza*; thick-walled entrance duct presented, and insemination duct simply coiled. A very long accessory gland also present.

Distribution – The genus is endemic in New Caledonia and in the neighbouring islands e.g. Loyality – Maré, Lifou (Berland 1924, János Balogh pers. comm.).

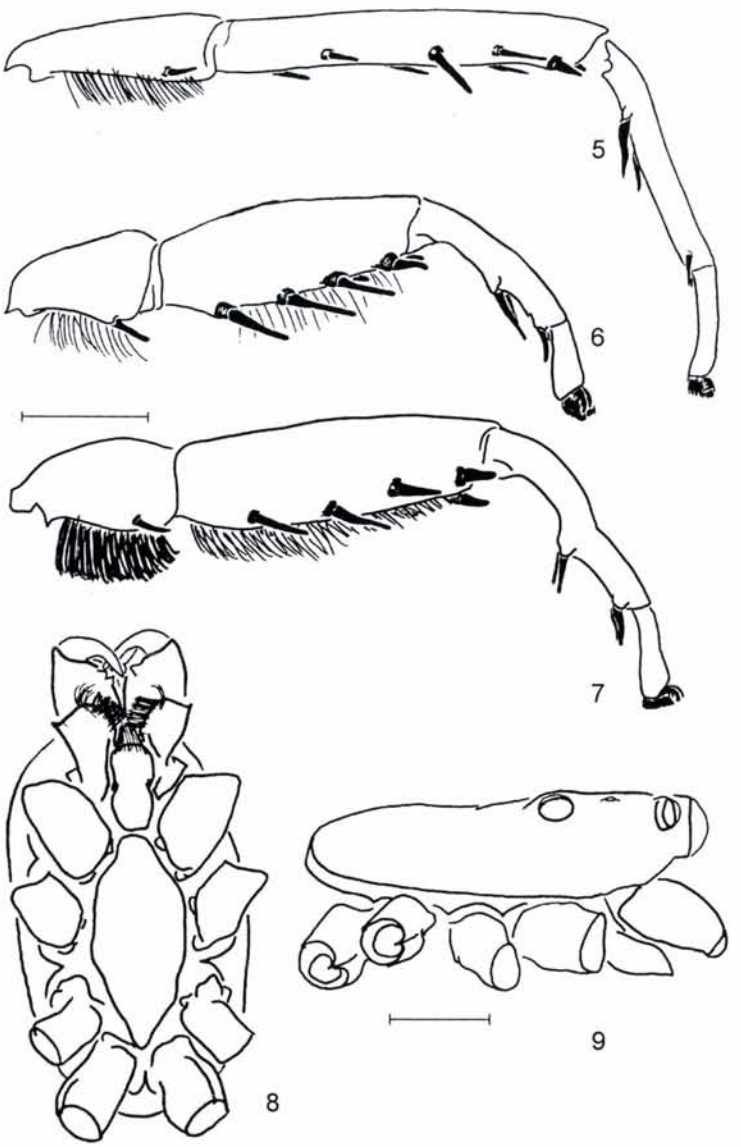
Corambis insignipes (Simon, 1880)

Hyctia insignipes Simon, 1880 *Ann. Soc. Ent. Belg.*, **23**: 165.
Corambis insignipes: Simon 1901 *Hist. Nat. des Araign.*, **2, 3**; 595, 596, 602, 609; Zabka 1988 *Ann. Zool., Warsawa*, **41**: 422, 443.

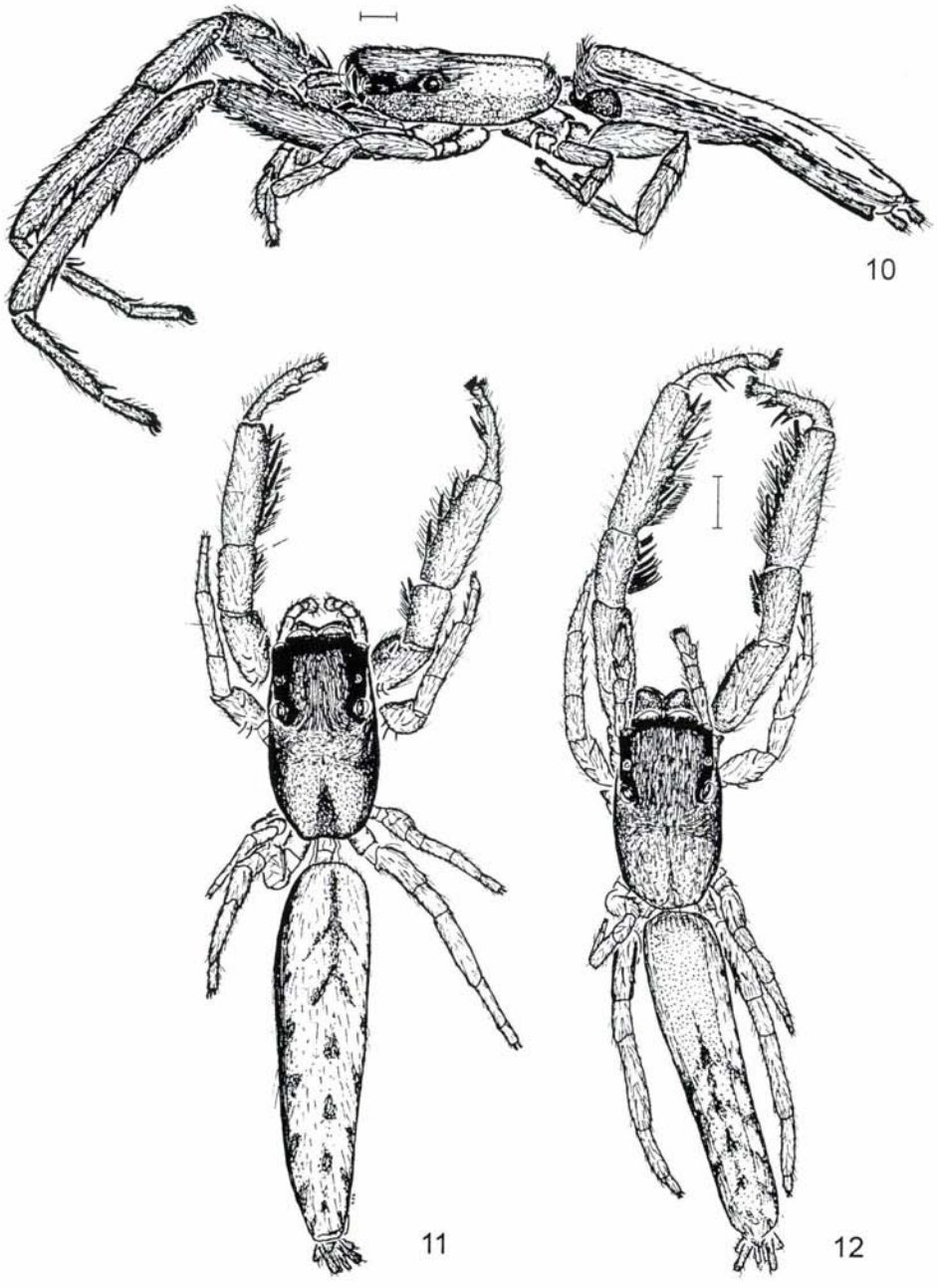
Material examined: New Caledonia: 2 males, 1 female, Col. d'Amiéu, I.19–24.1977, leg.: J. Balogh, beaten from trees (Hung. Soil. Exp.). 1 male (in very bad condition), Col. des Rousettes, II.5.1963, leg.: H. Krauss.

Diagnosis – The first metatarsus (in both sexes) short, sinuous (Figs 6–7). Male palpal tibial apophysis blunt.

Male (Figs 1, 12): Eye field brown, thorax darker on the sides with whitish hairs, and with two light yellow bands on the dorsum. Abdomen with long, poorly developed reddish scutum and greyish striped pattern on yellow background.



Figs 5–9. Body characters of *Corambis* – 5: *C. foeldvarii*, male, first leg – 6: *C. insignipes*, female, first leg – 7: *C. insignipes*, male, first leg – 8: Carapace, ventral view – 9: Carapace, lateral view. Scale: 1.0 mm



Figs 10–12. Body colour of *Corambis* – 10: *C. foeldvarii*, male – 11: *C. insignipes*, female – 12: *C. insignipes*, male. Scale: 1.0 mm

Spinnerets yellow. Clypeus narrow, with few white scales on the sides. Chelicerae well developed, dark brown. Maxillae and labium dark brown. Sternum light brown. Leg I the longest, robust, with dense hairs on femur, patella, tibia. Metatarsus short, sinuous ("bow shaped"). Spines on tibia and metatarsus I long.

Palpal organ with short embolus, tegulum oval and elongated (Figs 13–15). Tibial apophysis blunt. Femur with one dorsal spine.

Leg spination: fI d 1–1–1, pl 1 ap. pI pl 1, rl 1., tI pl 1–1–1, rl 1–1–1. mI pl 1–1, rl 1–1.; fII d 1–1–1, pl 1 ap, pII 0, tII v 1–1–1, pl 1–1–1, mII pl 1–1, rl 1–1;

Dimensions: CL 3.25, CW 2.85, CW/CL 0.87, EFL 1.4, EFL/CL 0.43, AEW 1.5, PEW 1.5, AL 6.1.

Female: Eye field brown, thorax darker with two paler dorsal band and whitish hairs on the sides. Abdomen with long, yellowish scutum and striped darker pattern on light yellow background. Spinnerets yellow. Clypeus very narrow with white scales. Chelicerae well developed, dark brown. Maxillae and labium dark brown. Sternum yellow. Leg I as in males, but metatarsus straighter, and hair brushes sparser.

Female genitalia with relative short insemination ducts. Accessory gland long, originating from the middle of the insemination ducts. Spermathecae small, rounded.

Leg spination: fI d 1–1–1, pl 1 ap. pI pl 1, rl 1., tI pl 1–1–1, rl 1–1–1. mI pl 1–1, rl 1–1.; fII d 1–1–1, pl 1 ap, pII 0, tII v 1–1–1, pl 1–1–1, mII pl 1–1, rl 1–1;

Dimensions: CL 3.75, CW 2.15, CW/CL 0.57, EFL 1.5, EFL/CL 0.4, AEW 1.8, PEW 1.8, AL 8.0.

Corambis foeldvarii sp. n.

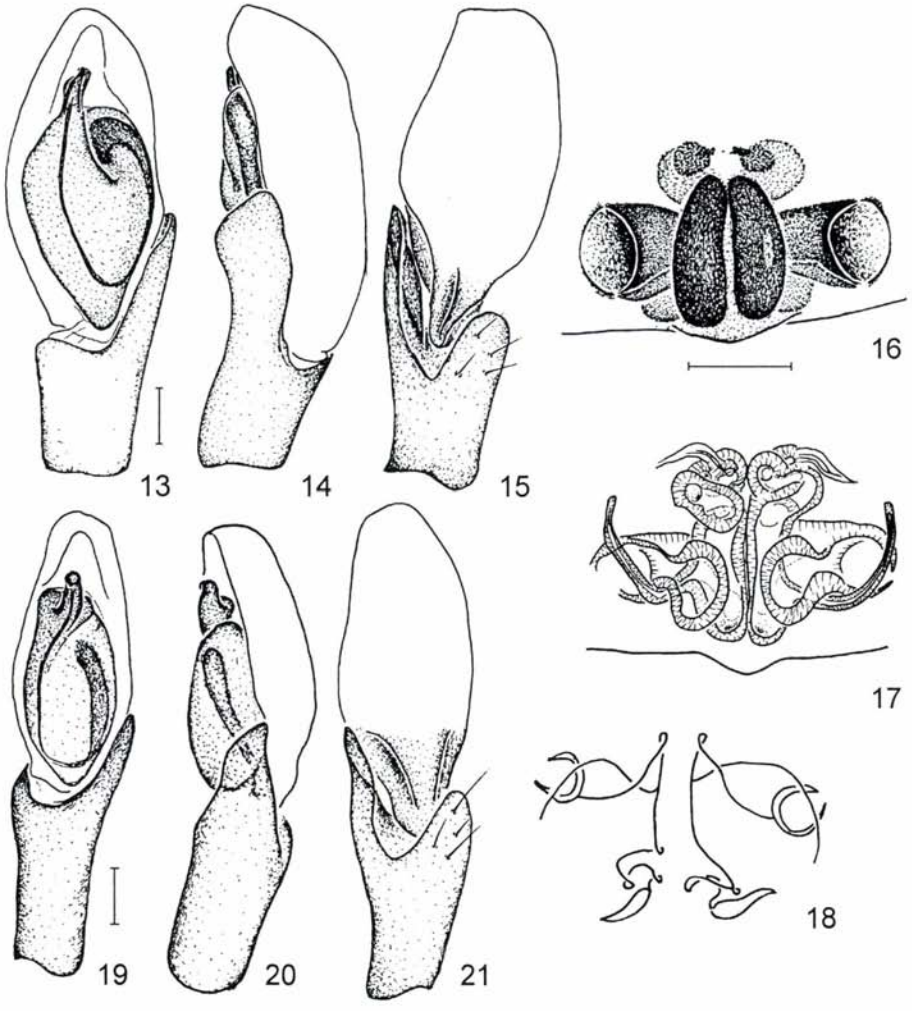
Material examined – Type material: New Caledonia: 1 holotype: male Poindimié, II.3.1977, leg.: J. Balogh, beaten from trees (Hungarian Soil Expedition); 1 paratype male from Caavatch (Hienghéne), II.5.1977, forest, beaten and singled, leg.: J. Balogh, (Hung. Soil. Exp.); 1 paratype male from Poindimié, I.30.1977, humid forest, beaten and singled, leg.: J. Balogh, (Hung. Soil. Exp.).

Diagnosis – The first metatarsi long, only mildly curved. Male palpal tibial apophysis slightly pointed.

Male: Eye field dark, thorax dark brown with two white lateral bands on the dorsum and whitish hairs on the sides. Abdomen with elongated, poorly sclerotized yellowish scutum and a dark dotted pattern on a pale background. Spinnerets pale yellow. Clypeus with whitish scales at the sides. Chelicerae more gracile than in the males of *C. insignipes*. First tooth on promargin fine and long, spine-like. Maxillae and labium brown. Sternum pale yellow. Leg I the longest, but thinner or

more gracile than in the previous species. Ventral hair brushes sparser (almost missing on tibia I), tibia longer and almost straight (Fig. 5).

Palpal organ with short embolus, originating on a swelling of the oval and elongated tegulum. Tibial apophysis slightly pointed. Femur with 5 spines; d 1–1–1, pl 1 ap, rl 1 ap.



Figs 13–19. Copulatory organs of *Corambis* spp.: 13 = *C. insignipes*, male palp, ventral view, 14 = same, lateral view, 15 = same, dorsal view, 16 = female, epigyne, 17 = female, vulva, 18 = diagrammatic course of the sperm ducts. 19 = *C. foeldvarii*, male palp, ventral view, 20 = same, lateral view, 21 = same, dorsal view. Scale in Figs 13–16 and 19 –21: 0.1 mm

Leg spination: fI d 1–1–1, pl 1 ap. pI pl 1, rl 1., tI pl 1–1–1, rl 1–1–1. mI pl 1–1, rl 1–1.; fII d 1–1–1, pl 1 ap, pII 0, tII v 1–1–1, pl 1–1–1, mII pl 1–1, rl 1–1;

Dimensions: CL 2.75, CW 1.5, CW/CL 0.54, EFL 1.1, EFL/CL 0.4, AEW 1.5, PEW 1.5, AL 7.0.

Etymology – This species is dedicated to my colleague, Mihály Földvári, a dipterologist, whom I would like to thank for his help during my first study trip in Belgium.

*

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REFERENCES

Berland, L. (1924): Araignées de la Nouvelle Calédonie et des iles Loyalty. – In: Sarazin, F. & Roux, J. (eds): *Nova Caledonia. Zoologie* **3**: 159–255.

Davies, V. & Zabka, M. (1989): Illustrated keys to the genera of jumping spiders (Araneae: Salticidae) in Australia. – *Memoirs of the Queensland Museum* **27** (2): 189–266.

Logunov, D. V. (1999): Redefinition of the genera Marpissa C. L. Koch, 1846 and Mendoza Peckham et Peckham, 1894 in the scope of the Holarctic fauna. – *Revue Arachnologique* **13** (3): 25–60.

Prószynski, J. (1976): *Studium systematyczno-zoogeograficzne nad rodzina Salticidae (Aranei) Regionow Palearktycznego i Nearktycznego*. Rozprawy Wyzszej Szkoly Pedagogicznej, Siedlce, **6**, 260 pp.

Simon, E. (1880): Matériaux pour servir à une faun arachnologique de la Nouvelle Calédonie. – *Annales de la Société Entomologique de Belgique* **23** (C.R.): 164–175.

Simon, E. (1901): *Histoire Naturelle des Araignées*. Paris, pp. 381–668.

Zabka, M. (1988): *Salticidae (Araneae)* of Oriental, Australian and Pacific Regions III. – *Annales zoologici*, Warszawa, **41** (14): 421–479.

Zabka, M. (1991): Salticidae (Arachnida: Araneae) of Oriental, Australian and Pacific Regions, V. Genus Holoplatys Simon, 1885. – *Records of the Australian Museum* **43**: 171–240.

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The Fauna of the Aggtelek National Park

VOLUMES I–II

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