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Salticidae (Arachnida: Araneae) of Oriental, Australian and Pacific Regions, V. Genus *Holoplatys* Simon, 1885

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ABSTRACT. The spider genus *Holoplatys* Simon is revised. Its relationships, origin and distribution are discussed. Six species groups based on genitalia and body structure are distinguished and key for their identification in proposed. *Holoplatys caledonica* Berl., *H. urvillei* Dalmas, *H. fractivittata* Sim. and *H. quinquecinqulata* Sim. are excluded from the genus. *Ocrisiona complanata* (L.K.), *O. invenusta* (L.K.) and *O. fusca* (Karsch) are included in *Holoplatys*. A total of 37 species are described and figured, including 31 new species: *bicoloroides*, *borali*, *braemarensis*, *bramptonensis*, *canberra*, *chudalupensis*, *colemani*, *complanatiformis*, *daviesae*, *dejongi*, *desertina*, *embolica*, *grassalis*, *jardinensis*, *julimarina*, *kalgoorlie*, *kempensis*, *lhotskyi*, *mascordi*, *meda*, *minuta*, *oakensis*, *panthera*, *pedder*, *pemberton*, *rainbowi*, *queenslandica*, *semiplanata*, *strzeleckii*, *tasmanensis* and *windjanensis*.

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A recent survey of the Australian Salticidae provides the list of 57 genera, most of them endemic (Davies & Zabka, 1989). Seven species are recorded from the genus Holoplatys (Simon 1901b, 1909; Dalmas, 1917; Berland, 1932; Koch, 1879), but an examination of type and new material shows that the real number of species is far greater. Thirty one new species are recognised and, in comparison to Bonnet's list (1957), the generic status of four species is altered. Holoplatys caledonica Berland, 1932, H. fractivittata Simon, 1909 and H. quinquecinqulata Simon, 1909 are transferred to new genera (Zabka, in preparation). Holoplatys urvillei Dalmas, 1917 should be included in Trite Simon. At the same time Ocrisiona complanata (L. Koch, 1879), O. invenusta (L. Koch, 1879) and O. fusca (Karsch, 1878) have been transferred to Holoplatys. Ocrisiona cinerea (L. Koch, 1879) and O. liturata (L. Koch, 1879) probably also belong to Holoplatys but as neither adult type specimens nor fresh material of either species are available, they are not included here.

Basically, the type species, *H. planissima* (L. K.) is the only species in the genus to have been studied in any detail (Prószynski, 1984; Davies & Zabka, 1989).

Material and Methods

The work is based on type specimens from European collections listed by Prószynski (1971) and on new material borrowed from several Australian museums and collected by the author. Twenty two species were described from one sex only and of these 18 were from a single specimen. The full list of collections used is presented below. Means (in brackets) and ranges are given in millimetres. The details of terminology are illustrated in Figure 1. Format of leg spination follows Platnick & Shadab (1975). Dissected epigynes were digested in lactic acid for 10 to 30 minutes or in 10% KOH for 12 to 48 hours at room temperature, rinsed in distilled water, stained in ethanol solution of chlorazol black E under control and then mounted in glycerin. The drawings were made using grid system. New specific names are derived from localities or, in other cases, their etymology is explained.

Close affinities within the genus and very fine specific

differences do not provide enough clearly defined characters for a species identification key to be constructed. Only a key for the species groups is proposed.

Collections studied include: AMS - Australian Museum, Sydney; ANIC - Australian National Insect Collection CSIRO, Canberra; MNHN - Museum National d'Histoire Naturelle, Paris; QMB - Queensland Museum, Brisbane; SAMA - South Australian Museum, Adelaide; TMH - Tasmanian Museum and Art Gallery, Hobart; WAMP - Western Australian Museum, Perth; ZMB - Zoologisches Museum der Humboldt-Universität, Berlin; ZMH - Zoologisches Institut und Zoologisches Museum, Universität Hamburg. Abbreviations used are: AEW - anterior eyes width, ag - accessory gland, AL - abdomen length, cd - cephalic depression, cf - cymbial flange, CL - cephalothorax length, CW - cephalothorax width, da - dorsal tibial apophysis, e - embolus, EFL - eye field length, ep - epigynal pocket, fd - fertilisation duct, id - insemination duct, m - metatarsus, p prolateral spines, PEW - posterior eyes width, r retrolateral spines, s - spermatheca, sc - abdominal scutum, sd - seminal duct, t - tibia, tg - tegulum, ta - lateral tibial apophysis.

Taxonomic Survey

Holoplatys Simon

Marptusa [part] L. Koch, 1879: 1100. Holoplatys Simon, 1885: 88. Ocrisina [part] Simon, 1901: 595, 602, 604, 608.

Type species. Marptusa planissima L. Koch, 1879, by monotypy.

Diagnosis. Genitalia structure, very flat body and cephalic depressions between posterior lateral eyes separate *Holoplatys* from other Australian genera. Tibial spines on first and second legs absent in most species.

Description (Fig.1). Tiny to large spiders, ranging from 2 to 11 mm in length. Body flat and narrow. Thoracic part of cephalothorax distinctly longer (up to

72% of total length) than cephalic part. Fovea displaced backwards, indistinct or not visible. Most species with 2 shallow cephalic depressions. Abdomen elongate, often with anterior scutum - better marked in males. Clypeus very narrow, in some species with fringe of short white hairs. Chelicerae small or very small, displaced backwards (Fig.1B), of unident pattern, with 2 promarginal teeth and 1 retromarginal tooth, the last sometimes missing. Maxillae and labium elongated. Legs I long and strong, especially in *planissima* group, their tibiae and metatarsi often cone-shaped, patellae and tibiae sometimes fringed. Legs III the shortest, IV the longest or as long as I.

Spines on tibia and metatarsus I and II usually (but not always) absent.

On the basis of general body form, colour pattern and genitalic structure six species groups are proposed: complanata, planissima, grassalis, panthera, bicolor and invenusta. Palpal organ (Figs 1C-E, 2A-T) with sac-like tegulum, seminal duct not meandering, embolus of variable length. Lateral tibial apophysis short. In planissima (Fig.2F-J), grassalis (Fig.2K-Q) and panthera (Fig.2R) groups dorsal tibial apophysis missing, but dorsolateral one present. Holoplatys invenusta with cymbial flange. Palpal organ of complanata group

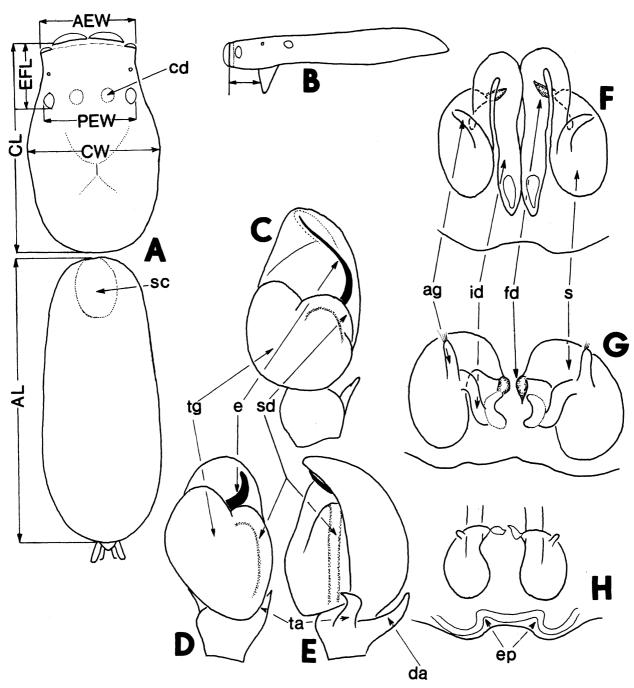


Fig.1. Morphological characters of *Holoplatys*: A – dorsal view, B – lateral view of cephalothorax, C-E – palpal organ, F-H – female genitalia. (Abbreviations in the text).

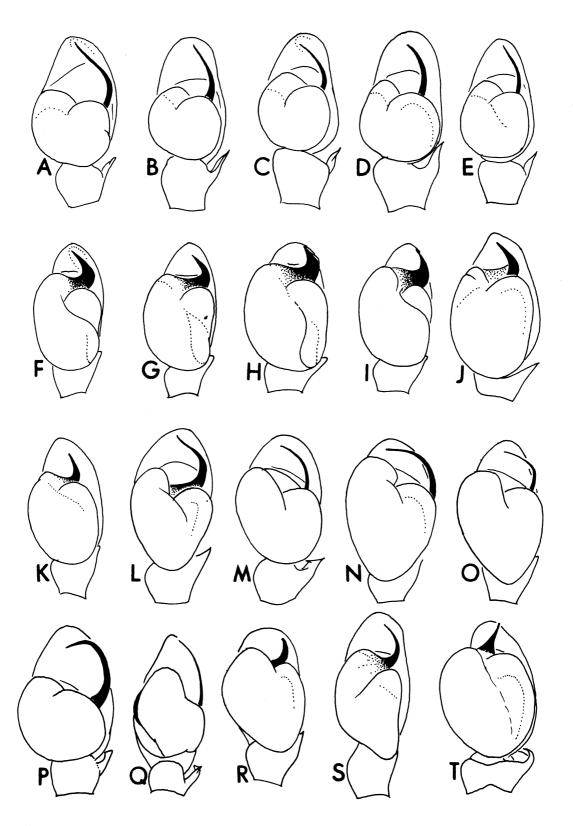


Fig.2. Morphological series of palpal organs in the genus *Holoplatys. complanata* group: A - H. complanata, B - H. pedder, C - H. colemani, D - H. senilis, E - H. semiplanata, planissima group: F - H. mascordi, G - H. planissima, H - H. strzeleckii, I - H. pemberton, J - H. fusca, grassalis group: K - H. grassalis, L - H. chudalupensis, M - H. daviesae, N - H. dejongi, O - H. kalgoorlie, P - H. embolica, Q - H. lhotskyi, panthera group: R - H. queenslandica, bicolor group: S - H. bicolor, invenusta group: S - H. invenusta.

(Fig.2A-E) similar to that in the genus *Ocrisiona* Simon. Epigyne and internal genitalia uniform in structure. Copulatory openings usually clearly visible, more or less distant from the epigastric furrow. Insemination ducts usually long. Spermathecae pear-shaped. Accessory glands relatively large, straight or curved, their shape and position of diagnostic value. Fertilisation ducts distinct. Posterior margin of epiqyne indented or not, sometimes accompanied by pockets.

Biology and Relationships

To better understand the morphology, number of species and relationships of Holoplatys, the climatic, vegetational and topographic history of Australia have to be considered. As a result of the onset of dryer climatic conditions in the late Tertiary and Quaternary the range of loose-barked trees (mainly *Eucalyptus*) increased enormously, providing good conditions for explosive speciation of bark inhabitants. Hypothetically, ancestors of *Holoplatys* were probably morphologically similar to other genera of jumping spiders but specialised as crevice dwellers became dorsally compressed to efficiently utilise narrow underbark spaces. With the exception of bark dwellers, single species have been collected on herbs and grass. Jackson & Harding (1982) note that the rolled-up leaves of the New Zealand flax (Phormium tenax) are a habitat of two undescribed species. The same paper provides interesting behavioural studies - the only available for the genus.

Ocrisiona seems the closest relative of Holoplatys (Zabka, 1990). The genital structure of both genera is

similar to that of species of the *complanata* group. Other species groups show reduced body size, tibial spines and cheliceral teeth and seem to be more specialised. Some other genera (including new ones) resemble *Holoplatys* in body form, and female genitalia, but their leg spination and palpal organs are usually different (Zabka, in preparation).

Distribution

The distribution of *Holoplatys* (Maps 1-9) is restricted to Australia, adjacent areas and New Zealand. Holoplatys complanata (L. K.), H. jardinensis n.sp. and H. queenslandica n.sp. are Australian species occurring in Papua New Guinea (Port Moresby area), and H. semiplanata n.sp. has also been recorded from New Caledonia. Holoplatys senilis Dalmas has been described from New Zealand and at least two other species from the area require description (Jackson & Harding, 1982). In fact, insufficient knowledge of the salticid fauna of large parts of the region prevents useful comment on the zoogeographic history of the genus. The maps of distribution given are preliminary and tend to reflect main centres of arachnological activity rather then real distribution ranges. For some widely distributed species ranges may have changed during the period of human activity and settlement. Timber transports, for example, could have been an excellent artificial dispersal mechanism. Natural colonisation by ballooning is a possible explanation for large distributions in spiders but there is no evidence for this in Holoplatys. Strongly bark adapted animals seem rather unlikely candidates for ballooning dispersal anyway.

Key to Species Groups of Holoplatys

Ι.	Palpal organ without dorsal tibial apophysis
	- Dorsal apophysis present3
2.	Medium to large spiders (5.70-10.60), tegulum without
	lobe
	- Smaller spiders, cephalothorax relatively high, tegulum
	elongate, with posterior lobe
3.	Tiny to medium spiders (2.23-4.89), embolus delicate,
	in most species thin and long. If embolus different
	cephalothorax almost parallel-sided and its thoracic
	part up to 72% of total length
	- Spiders larger (4.21-8.11), embolus massive, crescent-
	like, epigynal depression with distinctive margins

in other groups, almost parallel-sided ________panthera group

The complanata Group

Embolus shorter, cephalothorax more elongate than

The group consists of 14 species, widespread from north Queensland through New South Wales to Western Australia. Single specimens of two species have also been recorded from Papua New Guinea, New Caledonia and New Zealand.

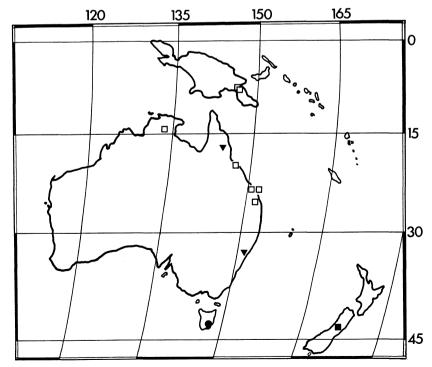
With the exception of *H. senilis* Dalmas, *H. pedder* n.sp. and *H. colemani* n.sp., all species show an abdominal mosaic with central dark stripe and herring-bone pattern. Body size 5.50-10.60 mm. Palpal organ without dorsal tibial apophysis, embolus long and thin. Epigynal depression with no distinctive margins. Insemination ducts long or very long. Tibial spines on legs I and (or) II usually absent but

present in *H. pedder* n.sp., *H. senilis* Dalmas and *H. windjanensis* n.sp. General pattern of genitalic structure almost identical to that found in the genus *Ocrisiona*. Species included: *complanata, pedder, senilis, colemani, complanatiformis, canberra, jardinensis, bramptonensis, rainbowi, meda, semiplanata, oakensis, kempensis, windjanensis.*

Holoplatys complanata (L. Koch) n.comb.

Figs 3-6, Map 1

Marptusa complanata L. Koch, 1879: 1093. Ocrisiona complanata.—Simon, 1901: 602.



Map 1. Inverted closed triangle – *H. colemani* n.sp.; open square – *H. complanata* (L. Koch); closed circle – *H. pedder* n.sp.; closed square – *H. senilis* (Dalmas).

Material examined. Queensland: SYNTYPES, 2 males, female, Port Mackay, Rockhampton, Gayndah, (Mus. Godeffroy 16522), ZMH; female, Tryon Island, 21 Aug. 1977, M. Jahnke, QMB S3582; female, Tryon Island, 21-29 Aug. 1971, H. Heatwole, QMB S3633; male, Homevale, beating vine thicket, 1-7 Apr. 1975, V. Davies, QMB S4611. Northern Territory: female, Roper River, M.J. Colclough, QMB W2137(a). Papua New Guinea: male, Izzy Dizzy Creek, Morobe Province, under bark of Araucaria cunninghami, 24 Sept. 1970, B. Gray, AMS KS18860; female, Bulolo, Morobe Province, 18 Aug. 1970, B. Gray, AMS KS

13220.

Diagnosis. Unlike *pedder*, *senilis* and *colemani* herring-bone abdominal pattern present and embolus longer than *semiplanata*. Accessory glands laterally curved and join the spermathecae on their inner walls.

Male (Fig.3A). Eye field black, thorax dark-brown,

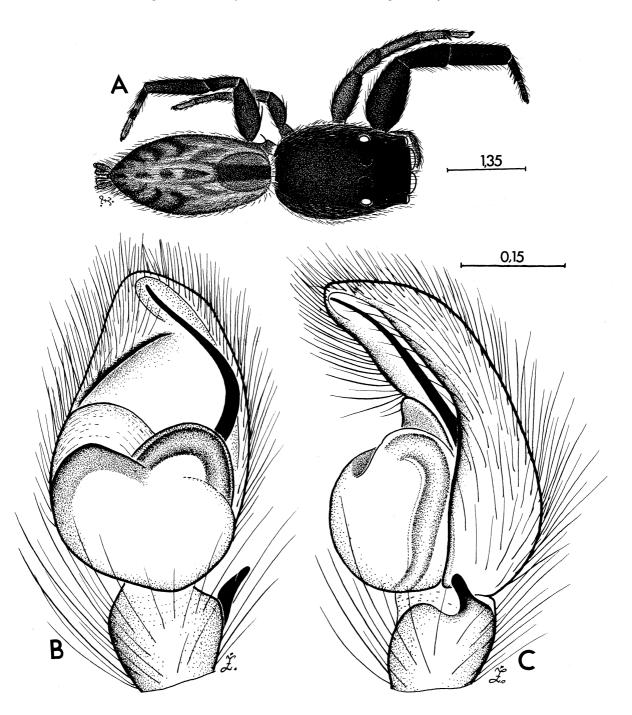


Fig.3. Holoplatys complanata, male (syntype).

numerous white hairs along lateral surfaces. Abdomen with orange anterior scutum and dark-grey pattern on yellowish or beige background. Spinnerets grey. Clypeus dark-brown with whitish hairs. Chelicerae dark-brown with transverse stripe of white setae proximally.

Maxillae and labium dark-brown, the last with light tips. Sternum dark-brown, venter dark-grey. Legs I black-brown, others slightly lighter, especially their distal segments.

Palpal organ (Fig.3B,C) with long embolus, tegulum

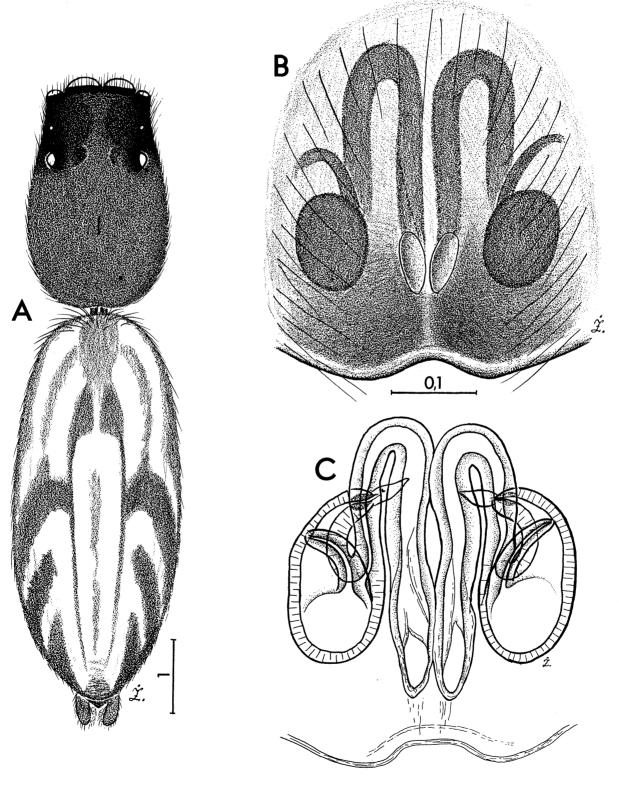


Fig.4. Holoplatys complanata, female (syntype).

oval and wide.

Leg spination. mI: p1-1, r1-1; mII: p1-1, r0-0 or r1-

Dimensions. CL 2.24-2.90 (2.48), CW 1.46-1.84 (1.60), CW/CL 0.63-0.67 (0.64), EFL 0.73-0.92 (0.81), EFL/CL 0.31-0.35 (0.32), AEW 1.15-1.38 (1.22), PEW

1.18-1.38 (1.25), AL 2.83-3.60 (3.42).

Female (Figs 4A, 5A, 6A). Cephalothorax brown with darker surrounding of eyes. Abdomen with beige and grey-brown pattern. Clypeus, chelicerae and maxillae brown, the last with yellow tips. Labium brown, sternum

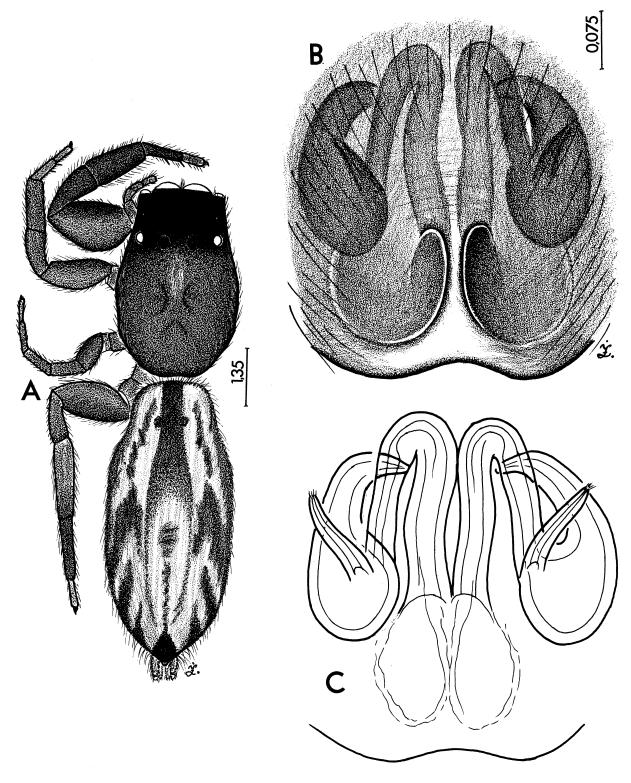


Fig.5. Holoplatys complanata, female from Bulolo.

light-brown, venter beige. Legs brown, dorsoventrally darker, distally lighter.

Genitalia (Figs 4B,C, 5B,C, 6B,C) with long insemination ducts, accessory glands curved laterally, located on inner walls of spermathecae.

Leg spination. mI: p1-1, r1-1; mII: p1-1, r1-1. Dimensions. CL 3.03-4.36 (3.87), CW 1.88-2.80 (2.44), CW/CL 0.62-0.64 (0.62), EFL 0.99-1.32 (1.19), EFL/CL 0.29-0.32 (0.31), AEW 1.38-1.84 (1.67), PEW 1.41-1.91 (1.72), AL 5.41-6.40 (5.90).

Holoplatys pedder n.sp.

Fig.7, Map 1

Material examined. Tasmania: HOLOTYPE, male, Lake Pedder, II.1967, A.J. Dartnall, TMH J.588.

Diagnosis. Black, slender spider. White hairs along cephalothorax form medial and marginal stripes. No

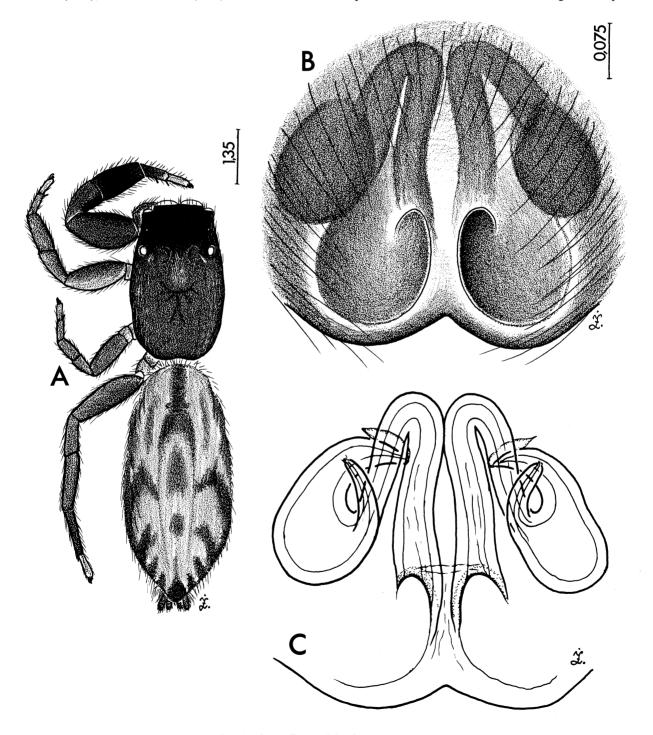


Fig.6. Holoplatys complanata, female from Tryon Island.

distinct scutum on abdomen, tibia I with single prolateral spine.

Male (Fig.7A). Cephalothorax black with central and marginal stripes of white hairs, its anterior part more sclerotised but without distinct scutum. Spinnerets black. Clypeus brown with white hairs centrally. Chelicerae brown, maxillae, labium and sternum dirty-brown. Venter grey-brown. Legs brown, lighter distally, lateral surfaces

darker, white and brown hairs numerous.

Palpal organ (Fig.7B,C) almost identical to *senilis* and *colemani*.

Leg spination. tI: p0-1; mI: p1-1, r1-1; mII: p1-1, r0-1

Dimensions. CL 3.12, CW 0.91, CW/CL 0.61, EFL 0.96, EFL/CL 0.30, AEW 1.32, PEW 1.34, AL 3.70.

Female. The female is unknown.

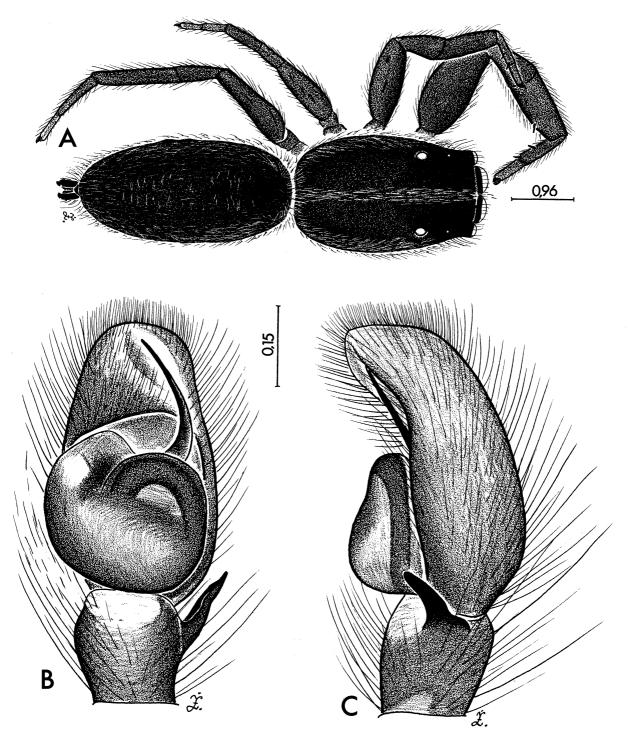


Fig.7. Holoplatys pedder, male (holotype).

Holoplatys senilis Dalmas

Figs 8,9, Map 1

Holoplatys senilis Dalmas, 1917: 416.

Material examined. New Zealand: male, female, MNHN B2341. Probably type-material but neither specimen's status nor locality marked on the original label.

Diagnosis. In comparison to pedder median stripe on

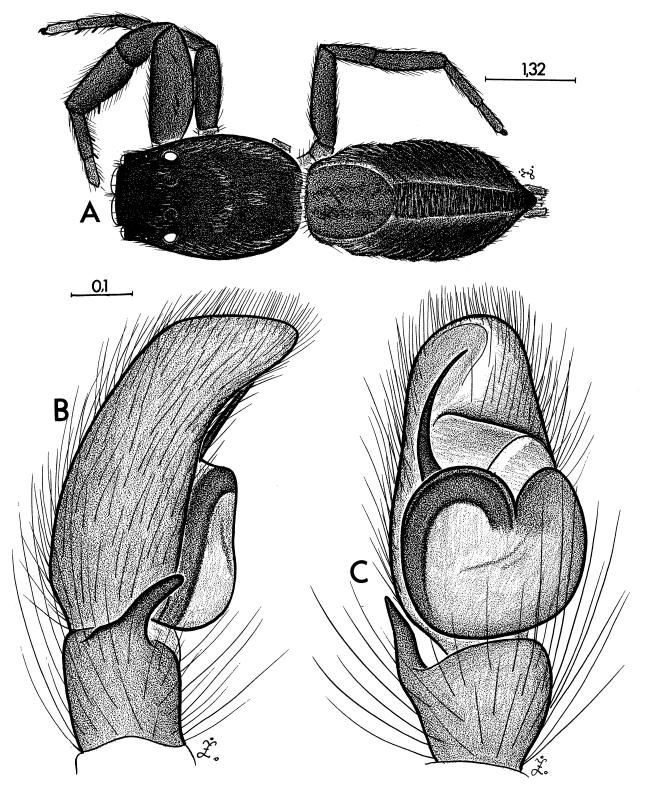


Fig.8. Holoplatys senilis, male (type?) from New Zealand.

cephalothorax less distinct, anterior abdominal scutum better marked. Tibia I with a single prolateral spine. Insemination ducts relatively short.

Male (Fig.8A). Eye field black, thorax dark-brown with scattered white hairs more numerous marginally. Abdomen generally dirty-brown with large anterior scutum and lighter posterior lines. Spinnerets greybrown. Clypeus dark-brown with cluster of white hairs centrally. Chelicerae dark-brown with transverse stripe of white hairs in their basal parts. Maxillae brown with lighter tips, labium dark-brown, sternum brown, venter

grey. Legs I dark-brown, distally gradually lighter. Other legs slightly lighter.

Palpal organ (Fig.8B,C) similiar to pedder.

Leg spination. tI: p0-1; mI: p1-1, r1-1; mII: p1-1, r1-

Dimensions. CL 2.70, CW 1.81, CW/CL 0.67, EFL 0.85, EFL/CL 0.31, AEW 1.28, PEW 1.28, AL 3.36.

Female (Fig.9C). Cephalothorax coloured as in male with white hairs scattered on eye field and more numerous in fovea region and marginally. Abdomen dark, grey-brown with whitish and brown hairs. Spinnerets

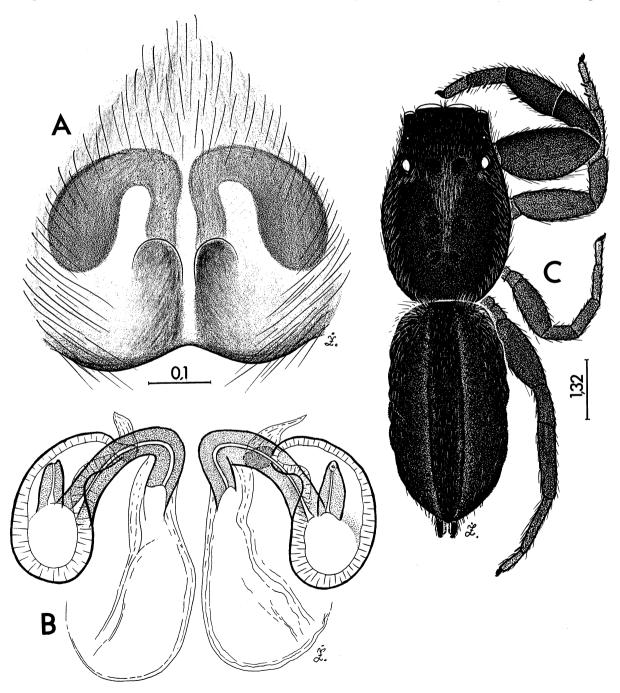


Fig.9. Holoplatys senilis, female (type?) from New Zealand.

black-brown. Clypeus and chelicerae black-brown, the first with light scattered hairs. Pedipalps dark-orange with white and yellow hairs. Maxillae and labium black-brown, lighter distally with yellow tips, sternum black-brown, venter grey-black. Legs I dark-brown, lighter distally, hairs rather numerous, light and brown.

Genitalia (Fig.9A-B) with insemination ducts shorter than in other species, accessory glands straight.

Leg spination. tI: p0-1, r0-0; mI p1-1, r1-1; mII: p1-1, r1-1.

Dimensions. CL 4.35, CW 2.83, CW/CL 0.65, EFL 1.25, EFL/CL 0.29, AEW 1.74, PEW 1.91, AL 4.68.

Holoplatys colemani n.sp.

Figs 10,11, Map 1

Material examined. Queensland: HOLOTYPE, male,

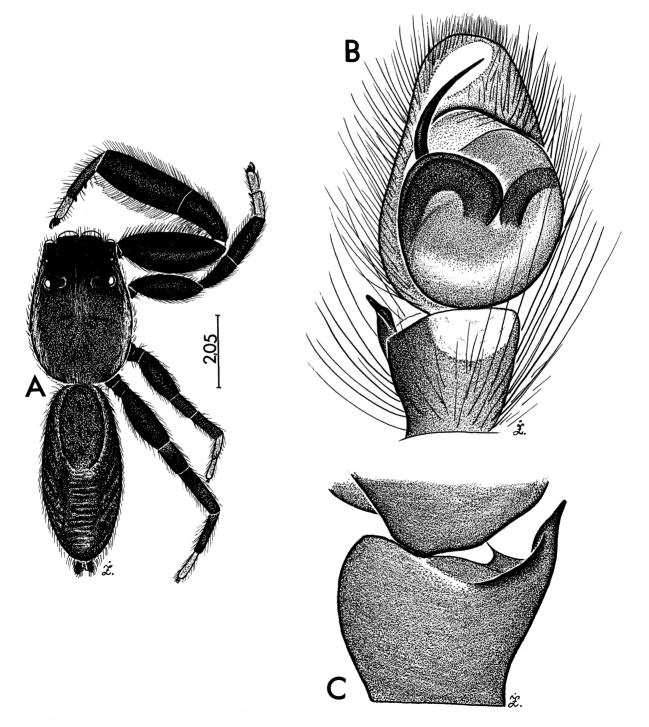


Fig.10. Holoplatys colemani, male (holotype).

ALLOTYPE, female, Wolfram, 3 May 1977, N.C. Coleman, AMS KS18815, KS19119. New South Wales: Paratypes, male, Botany, 10 Dec. 1978, R. Mascord, AMS KS4140.

Etymology. The specific name is proposed in honour of N. Clyde Coleman, Australian naturalist, collector of the part of the material studied.

Diagnosis. Dark spider but without median stripe on cephalothorax. In male first legs fringed, abdominal scutum present. Spines on tibia I missing.

Male (Fig.10A). Dark-brown spider with white

hairs around margins of cephalothorax. Abdomen with large anterior scutum. Clypeus black-brown with long light and dark hairs. Chelicerae dark-brown with transverse stripe of white hairs. Maxillae and labium dark-brown with yellow tips, sternum brown, venter greyish-black. Legs I fringed, black-brown, distal parts of tarsi orange. Other legs lighter.

Palpal organ as in Figure 10B,C.

Leg spination. mI: p1-1, r1-1; mII: p1-1, r1-1 or 0-0 or 0-1.

Dimensions. CL 3.23-4.15 (3.69), CW 2.11-2.84 (2.47), CW/CL 0.65-0.68 (0.67), EFL 1.00-1.18 (1.09), EFL/CL 0.28-0.30 (0.29), AEW 1.48-1.85 (1.66), PEW

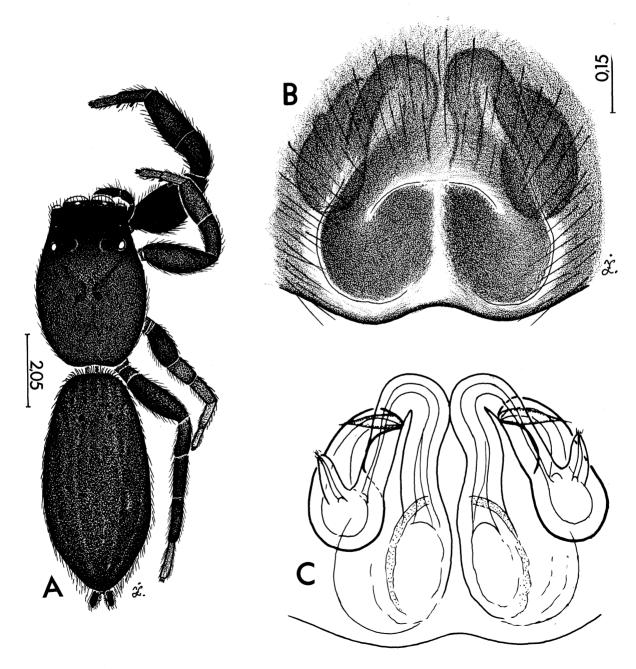


Fig.11. Holoplatys colemani, female (allotype).

1.51-1.91 (1.71), AL 3.76-5.08 (4.42).

Female (Fig.11A) generally as male but white marginal hairs less numerous and abdominal scutum absent. Clypeus brown-black with long hairs of the same colour. Chelicerae, maxillae, labium and sternum dark-brown, the first without frontal white hairs. Venter grey, with 2 longitudinal rows of lighter spots. Legs coloured as in male but shorter, legs I not fringed.

Genitalia (Fig.11B,C) very similar to other species of the group, especially to *semiplanata*.

Leg spination. mI: p1-1, r1-1; mII: p1-1.

Dimensions. CL 4.55, CW 2.97, CL/CW 0.65, EFL 1.25, EFL/CL 0.27, AEW 1.98, PEW 2.04, AL 6.07.

Holoplatys complanatiformis n.sp.

Fig.12, Map 2

Material examined. Queensland: HOLOTYPE, female, Lake Broadwater, Surveyors Gully, under bark, 27 Jan. 1985, M. Bennie, V. Davies, QMB S6760; PARATYPES, female, Brisbane, wasp nest, 24 Apr. 1974, V. Davies, QMB S4603. New South Wales: PARATYPES, female, Dubbo, 31 July 1966, AMS KS19120.

Diagnosis. Abdominal pattern present but darker than in related species. In comparison to *complanata* insemination ducts shorter, join the spermathecae on their lateral walls and position of accessory glands different.

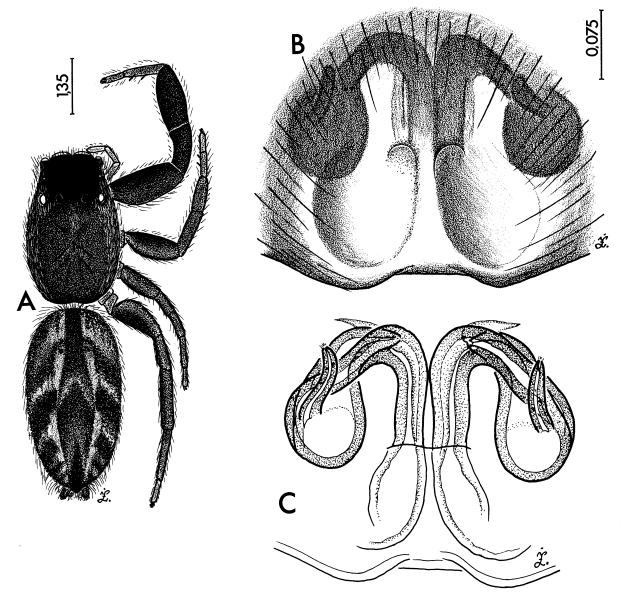


Fig.12. Holoplatys complanatiformis, dorsal body of female (holotype) and genitalia of paratype from Brisbane.

Male. The male is unknown.

Female (Fig.12A). Eye field dark-brown, thorax brown. Numerous white hairs on lateral surfaces of cephalothorax. Abdomen with light and dark-grey pattern, covered with numerous grey-brown and white hairs. Spinnerets greyish. Clypeus dark-brown with long white hairs, without fringe. Chelicerae, maxillae, labium and sternum dirty-brown, venter beige. Pedipalps yellow, darker distally with white hairs. Legs I dark-brown, lighter distally, darker laterally, other legs similar in colour.

Genitalia as in Figure 12B,C. In comparison to related species insemination ducts and accessory glands different.

Leg spination. mI: p1-1, r1-1; mII p1-1, r1-1. Dimensions. CL 3.23-3.63 (3.43), CW 2.08-2.37 (2.22), CW/CL 0.64-0.70 (0.67), EFL 1.00-1.12 (1.06), EFL/CL 0.30-0.31 (0.31), AEW 1.42-1.51 (1.46), PEW 1.59-1.65 (1.62), AL 4.29-4.35 (4.32).

Holoplatys canberra n.sp.

Fig.13, Map 2

Material examined. Australian Capital Territory: HOLOTYPE, female, Canberra, Dec. 1980, home wall, E. McCallan, QMB S4609.

Diagnosis. Closely related to *complanatiformis* but abdomen lighter and accessory glands much longer.

Male. The male is unknown.

Female (Fig.13A). Eye field dark-brown, thorax lighter. Around fovea and marginally white hairs present. Abdomen lighter than in *complanatiformis*. Spinnerets grey. Clypeus blackish with single long whitish hairs. Chelicerae brown, pedipalps orange with long white hairs. Maxillae brown with lighter tips, labium and sternum brown with darker margins. Venter light-grey with 2 longitudinal darker lines. Dorsal and ventral femora I and metatarsi orange, tarsi yellow, the rest dark-brown. Other legs lighter.

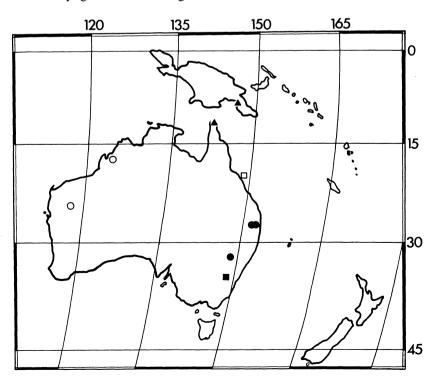
Genitalia (Fig.13B,C) with very long accessory glands, also distal part of spermathecae more elongate than in other species.

Leg spination. mI: p1-1, r1-1; mII: p1-1, r1-1. Dimensions. CL 2.88, CW 1.91, CW/CL 0.66, EFL 0.92, EFL/CL 0.32, AEW 1.26, PEW 1.38, AL 3.96.

Holoplatys jardinensis n.sp.

Fig.14, Map 2

Material examined. Papua New Guinea: HOLOTYPE, female, Central Province, Waigani, Botanic Garden, under Eucalyptus bark, 28 June 1988, D. Court, M. Zabka, AMS KS 19016; PARATYPES, 5 females, juvenile, same data, AMS KS19017. Queensland: PARATYPE, female, Cape York, Jardine River, 26 Aug. 1985, M. Bennie, QMB S4564.



Map 2. Open square -H. bramptonensis n.sp.; closed square -H. canberra n.sp.; closed circle -H. complanatiformis n.sp.; closed triangle -H. jardinensis n.sp.; open circle -H. meda n.sp.

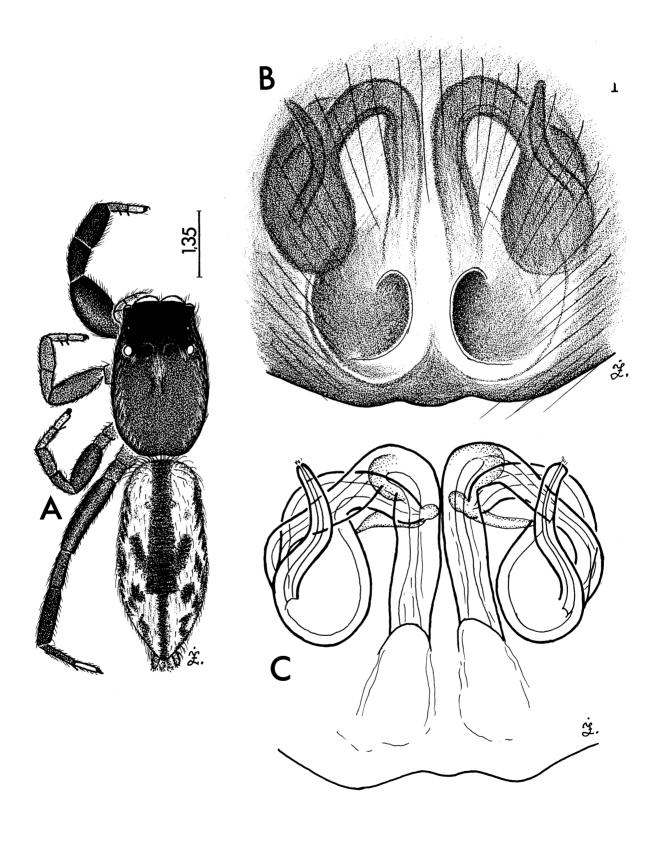


Fig.13. Holoplatys canberra, female (holotype).

Diagnosis. Insemination ducts twisted as in *bramptonensis* but distal parts of spermathecae different in shape. Accessory glands curved as in *complanata*.

Male. The male is unknown.

Female (Fig.14A). Eye field black, thorax brown, all covered with white hairs – more numerous laterally. Abdominal mosaic rather dark, spinnerets grey. Clypeus black, chelicerae dark-brown, maxillae, labium and sternum brown, venter beige. Legs I brown, others dirty-orange. All legs darker laterally and around joints.

Genitalia (Fig.14B,C) with long and twisted insemination ducts, fertilisation part of spermathecae narrow, accessory glands curved, located on inner walls of spermathecae.

Leg spination. mI: p1-1, r1-1; mII: p1-1, r0-0 or 0-1 or 1-1.

Dimensions. CL 2.83-3.76 (3.21), CW 1.71-2.38 (1.99), CW/CL 0.60-0.63 (0.61), EFL 0.99-1.12 (1.02), EFL/CL 0.30-0.35 (0.32), AEW 1.32-1.65 (1.47), PEW 1.38-1.71 (1.53), AL 3.69-5.08 (4.53).

Holoplatys bramptonensis n.sp.

Fig.15, Map 2

Material examined. Queensland: HOLOTYPE, female, Brampton Island, open *Eucalyptus* forest, 26 Feb. 1975, D.A. Schultz, QMB S3548.

Diagnosis. Insemination ducts twisted as in *jardinensis*

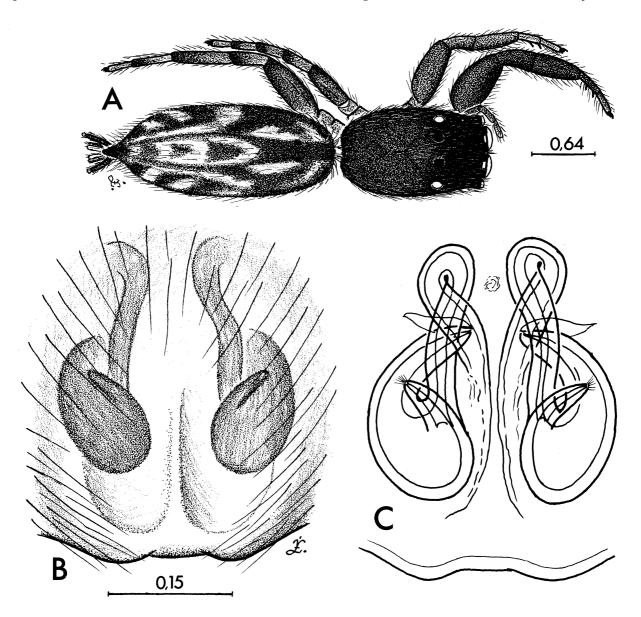


Fig.14. Holoplatys jardinensis, dorsal body of female (holotype) and genitalia of paratype from Jardine River.

but distal parts of spermathecae wider, also position and shape of accessory glands different.

Male. The male is unknown.

Female (Fig.15A). Eye field black-brown. Thorax brown, around fovea lighter, with cluster of white hairs, similar hairs also on lateral thorax. Abdomen with grey pattern on yellowish background. Spinnerets grey. Clypeus

and chelicerae dark-brown, maxillae of the same colour with yellow tips, labium and sternum dirty-brown. Venter grey with 4 longitudinal rows of lighter spots. Legs I generally brown, darker on distal femur, patella, tibia and proximal metatarsus. Other legs lighter.

Genitalia (Fig.15B,C) with twisted insemination ducts, spermathecae vast, accessory glands rather short.

Leg spination. mI: p1-1, r1-1; mII: p1-1. Dimensions. CL 3.30, CW 2.04, CW/CL 0.62, EFL

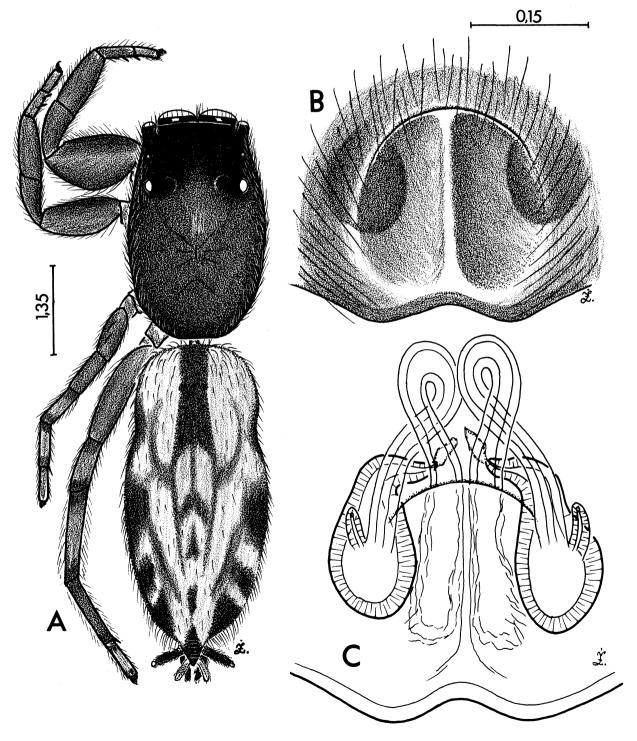


Fig.15. Holoplatys bramptonensis, female (holotype).

0.99, EFL/CL 0.30, AEW 1.55, PEW 1.58, AL 4.81.

Holoplatys rainbowi n.sp. Fig.16, Map 3

Material examined. Queensland: HOLOTYPE, female, Brisbane, Lake Broadwater, 26 Jan. 1985, M. Bennie, V.

Davies, QMB S3594.

Etymology. The specific name is proposed in honour of William James Rainbow, former Entomologist at the Australian Museum, Sydney.

Diagnosis. Insemination ducts very long, spermathecae more elongated than in other species, accessory glands straight.

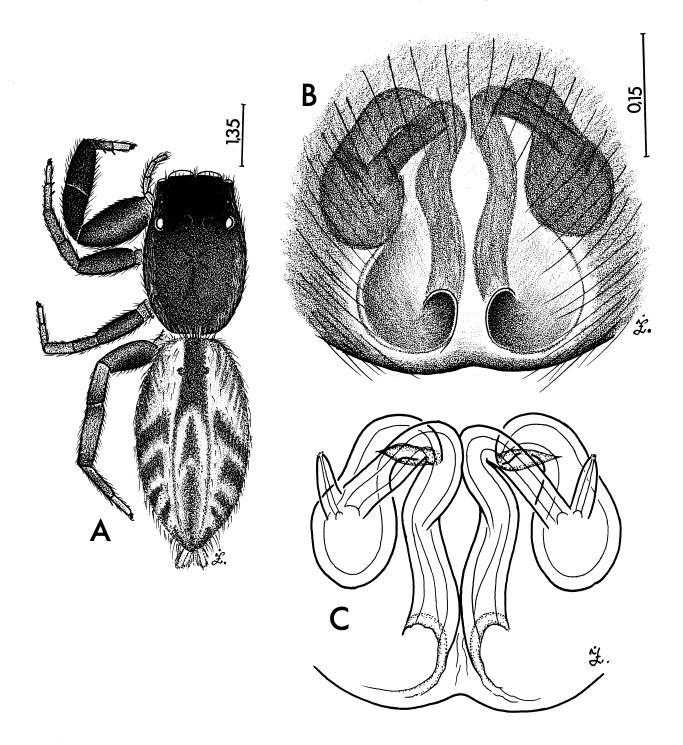


Fig.16. Holoplatys rainbowi, female (holotype).

Male. The male is unknown.

Female (Fig.16A). Eye field black-brown, thorax brown with white hairs on lateral surfaces. Abdomen with dark and yellowish-grey pattern. Spinnerets yellowgrey. Clypeus and chelicerae black-brown, maxillae and labium of the same colour with yellow tips, sternum dirty-brown, venter light-grey. Legs I generally brown, with darker distal part of femur, patella, tibia, proximal metatarsus. Other legs generally lighter, darker laterally and around joints.

Genitalia (Fig.16B,C) similar to *complanata*, *meda* and *semiplanata* but insemination ducts and spermathecae longer.

Leg spination. mI: p1-1, r1-1; mII: p1-1.

Dimensions. CL 3.36, CW 2.14, CW/CL 0.63, EFL 1.05, EFL/CL 0.31, AEW 1.51, PEW 1.58, AL 4.62.

Holoplatys meda n.sp.

Fig.17, Map 2

Material examined. Western Australia: HOLOTYPE, female, Meda Station, 22 Aug. 1987, A.E. de Jong, WAMP 88/22; PARATYPE, female, South Hedland, at airport, under bark of *Eucalyptus* sp., 24 Apr. 1989, M.S. Harvey, WAMP 89/284.

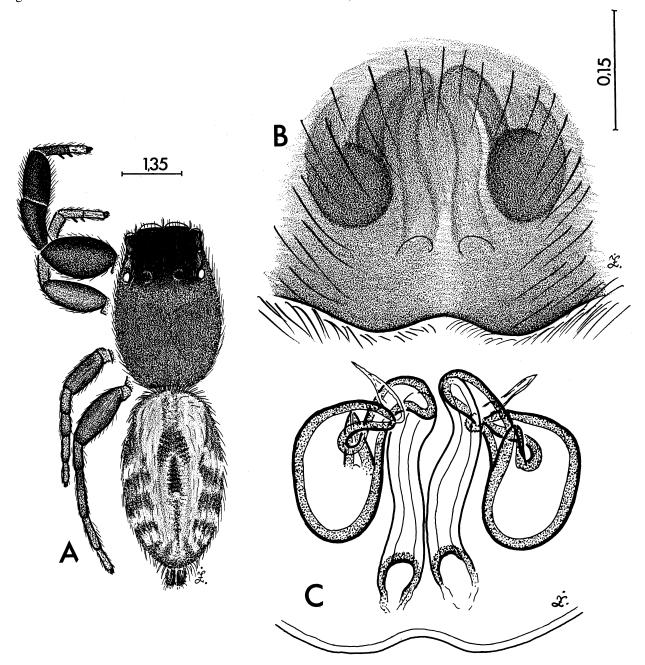


Fig.17. Holoplatys meda, female (holotype).

Diagnosis. Insemination ducts as in *rainbowi* but spermathecae relatively smaller, especially their distal parts. Also accessory glands in different position.

Male. The male is unknown.

Female (Fig.17A). Eye field black, thorax dirty-orange, marginally darker, with white and brown hairs. Abdomen with dark-grey and yellowish pattern, covered with white and brown hairs more numerous marginally. Spinnerets dirty-yellow. Clypeus black-brown with long white and blackish hairs. Chelicerae, maxillae and labium dark-brown, the last with yellow tips. Pedipalps dirty-orange, sternum dirty-brown, lighter posteriorly. Venter light-grey. Legs I brown, lighter distally and dorsoventrally. Other legs lighter.

Genitalia (Fig.17B,C) with long insemination ducts. Spermathecae smaller than in *rainbowi* and accessory glands on inner walls of spermathecae.

Leg spination. mI: p1-1, r1-1; mII: p1-1.

Dimensions. CL 3.56-3.75 (3.65), CW 2.27-2.60 (2.43), CW/CL 0.62-0.66 (0.64), EFL 1.12, EFL/CL 0.31-0.32 (0.31), AEW 1.65, PEW 1.71-1.75 (1.73), AL 3.96-5.04 (4.50).

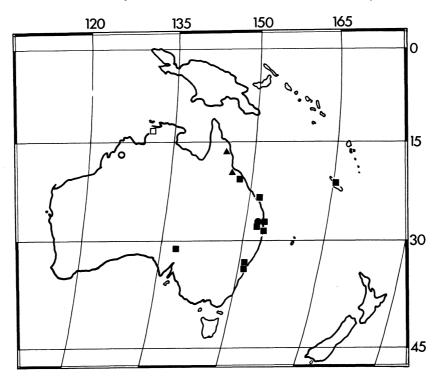
Holoplatys semiplanata n.sp. Figs 18-20, Map 3

Material examined. Queensland: HOLOTYPE, male, ALLOTYPE, female, PARATYPES, female, juvenile, Heron

Island, heathland, under bark of dead wood, 15 July 1978, V. Davies, QMB S3580; female, Proserpine, 17 Aug. 1971, N.C. Coleman, QMB S4600; female, Brisbane, Mitchelton, 6 Dec. 1983, C. Morrow, QMB S4566; male, Lake Broadwater, buildings, 1-15 Nov. 1984, V. Wood, QMB S4599; female, Lake Broadwater, Surveyors Gully, under bark, 27 Nov. 1985, M. Bennie, V. Davies, QMB S3599; male, Ciba-Geigy, Beenleigh, 8 Nov. 1978, L. Thomas, QMB S4578. New South Wales: PARATYPES, male, Kyogle, ex mud cell of Sceliphron sp. (wasp), 16 Feb. 1984, D.J. Scambler, AMS KS18863; male, female, Botany, 20 Apr. 1980, R. Mascord, AMS KS7574; female, Ermington, 16 Mar. 1958, R. Ford, AMS KS18864; male, Sydney, Oxford Falls, 29 May 1984, D. Mead-Hunter, WAMP 88/36; male, Botany, 28 Mar. 1978, R. Mascord, AMS KS18862. South Australia: PARATYPES, male, Andamooka Range, Exp. camp 5.7, 3 Sept. 1947, Mitchell, G.F. Gross, SAMA N1988339. New Caledonia: PARATYPE, male, Noumea, 'Ringarsoma', 26 Sept. 1901, J.J. Walker, AMS KS18861.

Diagnosis. Similar to *complanata* but embolus shorter, tegulum more elongate, accessory glands shorter and straight. In comparison to other males of the group abdominal pattern different.

Male (Fig.18A). White hairs along median and marginal parts of dark-brown cephalothorax. Abdomen with anterior orange scutum and dark-grey and light pattern. Spinnerets dark-grey to black. Clypeus grey to black with single long hairs of the same colour. Chelicerae brown with fringe of white hairs on frontal surface. Maxillae brown to black with lighter tips, labium and sternum dirty-brown. Venter dark-grey with



Map 3. Open square – H. kempensis n.sp.; closed triangle – H. oakensis n.sp.; closed circle – H. rainbowi n.sp.; closed square – H. semiplanata n.sp.; open circle – H. windjanensis n.sp.

2 longitudinal lighter stripes. Legs brown, lighter distally, darker on tibia and lateral surfaces of other segments.

Palpal organ (Fig.18B,C) similar to other species - especially to *colemani*.

Leg spination. mI: p1-1, r1-1; mII: p1-1. r0-1.

Dimensions. CL 2,97-4,48 (3.44), CW 1.91-2.57 (2.13), CW/CL 0.57-0.64 (0.62), EFL 0.92-1.13 (1.01), EFL/CL 0.25-0.30 (0.29), AEW 1.41-1.65 (1.46), PEW

1.41-1.71 (1.50), AL 3.36-5.34 (4.01).

Female (Figs 19A, 20A). Dorsal aspect as in male, but no abdominal scutum. Chelicerae, maxillae, labium and legs as in male, but the first not fringed. Pedipalps orange-brown, sternum light-brown with darker margin.

Genitalia (Figs 19B,C, 20B,C) similar to *complanata* but accessory glands shorter, not curved.

Leg spination. mI: p1-1, r1-1; mII: p1-1, r0-1. Dimensions. CL 3.56-4.03 (3.79), CW 2.24-2.51 (2.39), CW/CL 0.62-0.64 (0.63), EFL 1.05-1.28 (1.15),

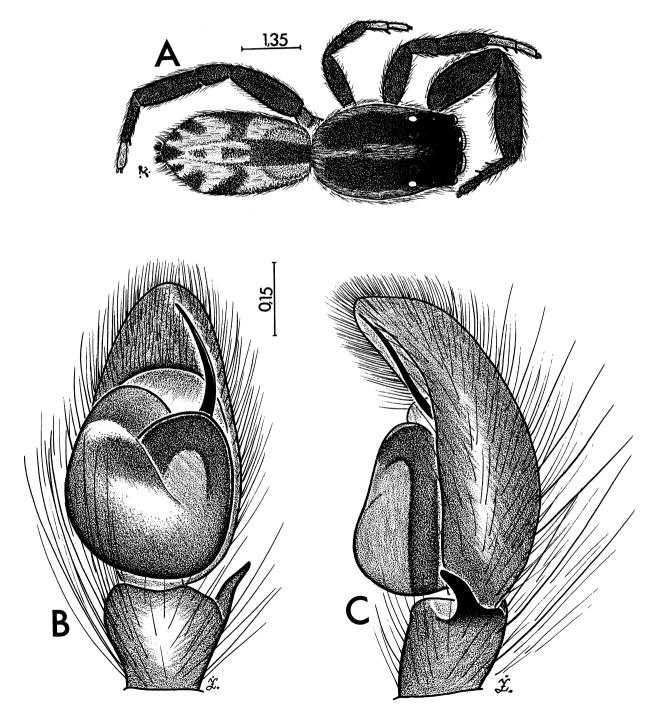


Fig.18. Holoplatys semiplanata, male (holotype).

EFL/CL 0.28-0.32 (0.30), AEW 1.58-1.75 (1.65), PEW 1.65-1.78 (1.70), AL 4.35-7.26 (5.49).

Oak Forest, summer 1971-72, N.C. Coleman, QMB S4570; PARATYPE, female, Mount Elliot N.P., Alligator Creek, July 1986, M.S. Harvey, P.J. Vaughan, WAMP 89/269.

Holoplatys oakensis n.sp.

Fig.21, Map 3

Material examined. Queensland: HOLOTYPE, female,

Diagnosis. Genitalic structure similar to *semiplanata* but body colour much lighter, cephalothorax with numerous lateral white hairs, abdominal median stripe less distinctive.

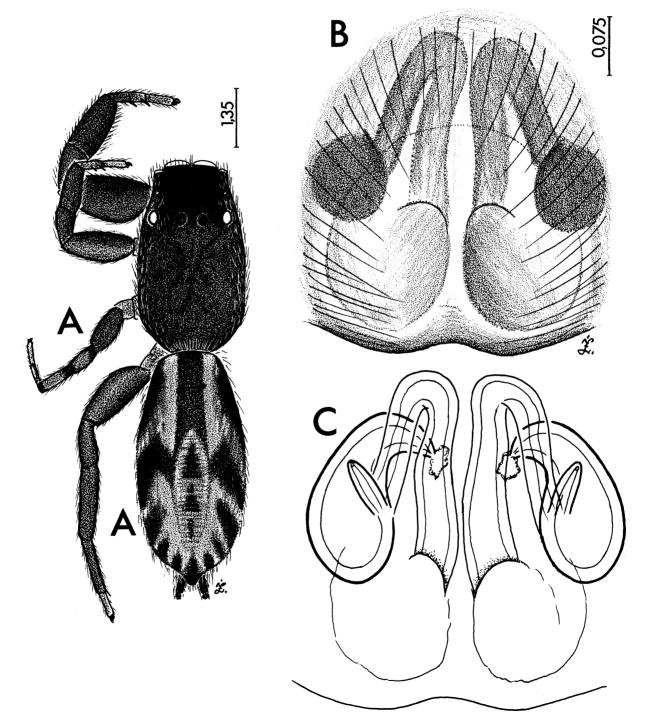


Fig.19. Holoplatys semiplanata, female (allotype).

Male. The male is unknown.

Female (Fig.21A). Eye field black, thorax brown with marginal stripes of white hairs. Abdomen with yellow and beige pattern but generally lighter than in other species of the group. Spinnerets yellow. Clypeus black, chelicerae, maxillae, labium and sternum dirty-brown, pedipalps yellow. Venter

yellowish. Legs I brown, others yellow. Genitalia (Fig.21B,C) very similar to *semiplanata*.

Leg spination. mI: p1-1, r1-1; mII: p1-1.

Dimensions. CL 2.80-3.10 (2.95), CW 1.80-1.98, CW/CL 0.58-0.63 (0.61), EFL 0.93-0.99 (0.96), EFL/CL 0.31-0.33 (0.32), AEW 1.35-1.45 (1.40), PEW 1.41-1.49 (1.45), AL 3.84-3.89 (3.86).

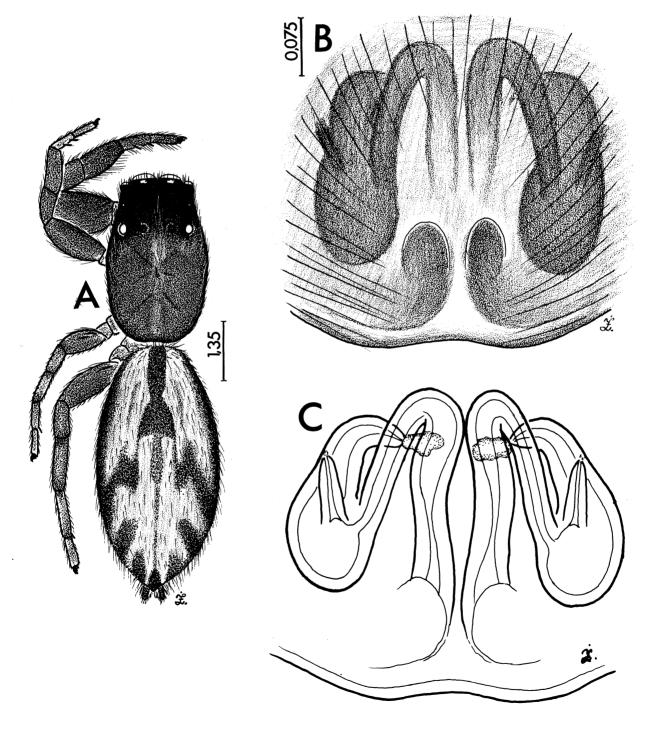


Fig.20. Holoplatys semiplanata, female (paratype from Brisbane).

Holoplatys kempensis n.sp.

Fig.22, Map 3

Material examined. Northern Territory: HOLOTYPE, female, PARATYPES, 2 juveniles, Kemp Airstrip, bark peeling, 16 Nov. 1979, R. Raven, QMB S3589.

Diagnosis. Abdomen with white pigmented spots on beige background. Body size smaller than in other representatives of the group, depressions on eye field missing.

Male. The male is unknown.

Female (Fig.22A). Eye field dark-grey, eye surrounding darker, thorax yellow, its lower margin darker. Abdomen with beige median stripe furced posteriorly and with white pigmented spots on beige background. Abdominal margin blackish. Spinnerets yellowish. Clypeus dark, brown-grey. Chelicerae, maxillae, labium, sternum and legs yellow. Venter with white pigmented spots as dorsally.

Genitalia (Fig.22B,C) similar to other species of the group.

Leg spination. mI: p1-1; mII: p0-1.

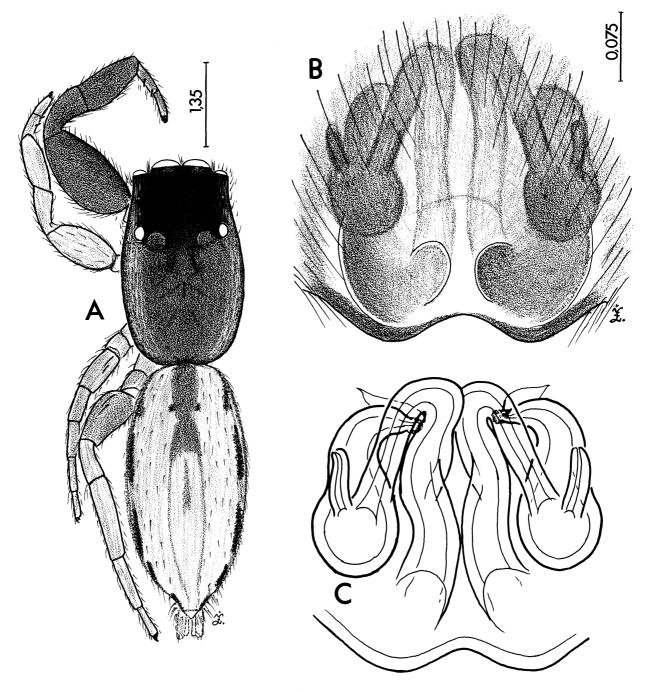


Fig.21. Holoplatys oakensis, female (holotype).

Dimensions. CL 2.51, CW 1.59, CW/CL 0.63, EFL 0.84, EFL/CL 0.34, AEW 1.25, PEW 1.25, AL 3.03.

Holoplatys windjanensis n.sp.

Fig.23, Map 3

Material examined. Western Australia: HOLOTYPE, female, Windjana Gorge, 21 Aug. 1987, A.E. de Jong, WAMP

88/34.

Diagnosis. Abdomen with dark median hairs and white pigmented spots like in *kempensis* but tibial spines on legs I present.

Male. The male is unknown.

Female (Fig.23A). Eye field brownish-grey with light-

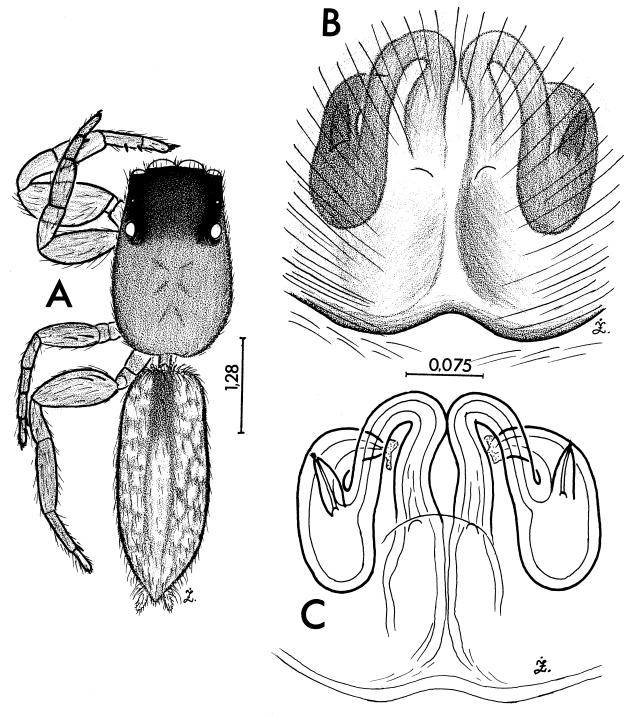


Fig.22. Holoplatys kempensis, female (holotype).

grey hairs in its central part. Surroundings of eyes black. Thorax with yellow median stripe surrounded by dark hairs. Lower margin of cephalothorax brown. Abdomen with median black hairs and white pigmented spots on pale background. Lateral surfaces with darkgrey hairs. Clypeus dark-brown, fringed with white hairs. Chelicerae dirty-brown, pedipalps yellowish, with white long hairs. Maxillae and labium grey-orange, sternum yellow with darker margin. Venter spotted as dorsally. Legs yellowish.

Genitalia (Fig.23B,C). Insemination ducts, spermathecae and accessory glands shorter than in other species of the group.

Leg spination. tI: p1-1; mI: p1-1, r1-1; mII: p1-1.

Dimensions. CL 3.17, CW 2.18, CW/CL 0.68, EFL 1.05, EFL/CL 0.33, AEW 1.52, PEW 1.58, AL

4.22.

The planissima Group

The group consists of eight species, spread from tropical Queensland through New South Wales to Western Australia. Body small to medium (4.21-8.11 mm). Abdomen usually with dark medium stripe or herringbone pattern. No tibial spines on legs I and II. Male palpal organ with dorsal and lateral tibial apophyses, tegulum large, sac-like, embolus shorter and more massive than in the complanata group. Epigynal depression usually with distinctive margins. Species included: planissima, strzeleckii, tasmanensis, fusca, pemberton, marscordi, braemarensis, julimarina.

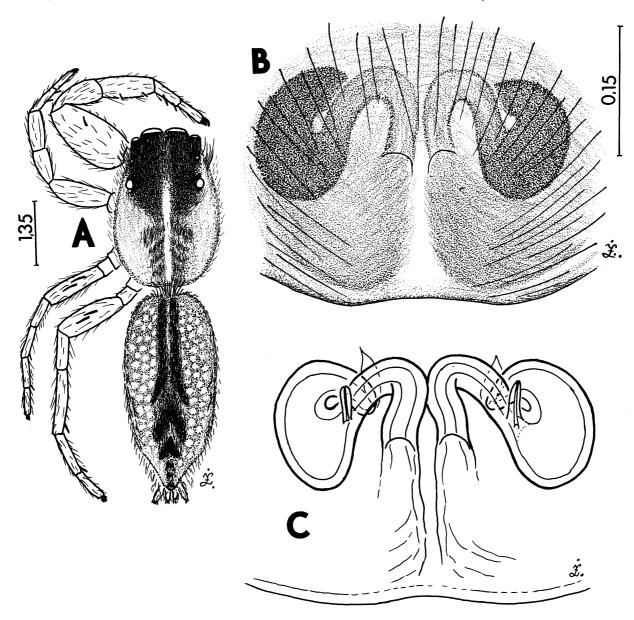


Fig.23. Holoplatys windjanensis, female (holotype).

Holoplatys planissima (L. Koch)

Figs 24-27, Map 4

Marptusa planissima L. Koch, 1879: 1100 Holoplatys planissima.—Simon, 1885: 445.—Mascord, 1970: 28.—Prószynski, 1984: 51.—Davies & Zabka, 1989: 262.

Material examined. Queensland: SYNTYPES, male, female, Rockhampton, ZMB 3488; female, Cairns, N.C. Coleman, 25 May 1969, AMS KS18879; female, Girraween, R.R. Jackson, 8 Sept. 1983, QMB S3562; 9 males, 20 females, 7 juveniles, Lake Broadwater, 21 Mar. 1984, 11 July 1984, 28 July 1984, 17 Oct. 1984, 16 Nov. 1984, 26 Nov. 1984, 26-27 Jan. 1985, M. Bennie, V. Davies, J. Gallon, P. Lawless, QMB S3595-6, S3600-7; female, Salvator Rosa N.P., 13 Sept. 1984, M. Bennie, QMB S3549. New South Wales: female, Antonio, near Rydal, 18 Jan. 1906, L.J.H. Morian, AMS KS18881; 2 females, Jenolan Caves, Y. Wiburd, AMS KS18878; female, south of Wilcannia, Tintinology Station, Darling River banks, under bark, 6 Apr. 198, D. Hirst, SAMA N1988355; male, female, East Kurrajong, 23 July 196, R. Mascord, AMS KS18876; 2 females, Sydney, 18 Feb. 1899, A. Rainbow, AMS KS 18880; 2 females, Silverdale, 2 July 1967, C.E. Chadwick, AMS KS1. Victoria: female, 17 km east of Bendigo, 17 Nov. 1976. G. Daniels, AMS KS6; female, 8.5 km south of Mount Killawara, Warby Ranges, under Eucalyptus bark, Nov. 1978, M.S. Harvey, WAMP 89/279; female, 32 km north-west of Stawell, on Western Highway, under bark of Eucalyptus sp., 30 June 1982, M.S. Harvey, B.E. Roberts, WAMP 89/280, South Australia: 5 females, 5 km south of Mylor, 8 June 1980, A.D. Austin, AMS KS10527. Western Australia: 2 females, 4 juveniles, Kalgoorlie, Mar. 1968, WAMP 88/14, 88/17-20.

Diagnosis. Body colour shows some individual variability. Leg I long, especially tibia and metatarsus of male, abdominal anterior scutum more or less visible. Clypeus not fringed. Genitalia almost identical to many other species of the group.

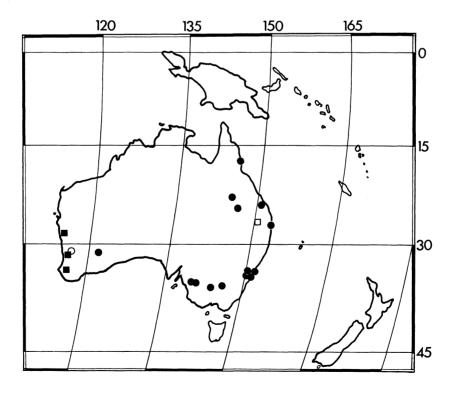
Male (Figs 24A, 26A). Cephalothorax brown to black, darker on eye field. Marginally white hairs present. Abdomen dark with anterior scutum and white lateral hairs. Spinnerets grey to black. Clypeus, chelicerae, maxillae, labium and sternum grey-brown to black, venter light to dark-grey. Legs long, especially first ones, brown to black, darker laterally and around joints.

Palpal organ (Figs 24B,C, 26B,C) with crescent-like embolus and sac-like tegulum with shallow depression on its surface.

Leg spination. mI: p1-1, r1-1; mII: p0-1.

Dimensions. CL 2.44-3.10 (2.74), CW 1.45-1.91 (1.69), CW/CL 0.59-0.61 (0.60), EFL 0.73-0.86 (0.80), EFL/CL 0.27-0.30 (0.29), AEW 1.05-1.25 (1.14), PEW 1.05-1.32 (1.17), AL 3.10-4.62 (3.71).

Female (Figs 25A, 27A,E). Cephalothorax similar to that in male but slightly wider, also marginal white hairs less numerous. Abdomen beige with darker median pattern and lighter longitudinal stripes. Sometimes abdomen much darker. Clypeus, chelicerae, labium, sternum and venter as in male, pedipalps orange to brown. Legs coloured as



Map 4. Open square -H. braemarensis n.sp.; open circle -H. julimarina n.sp.; closed square -H. pemberton n.sp.; closed circle -H. planissima (L. Koch).

in male but first ones considerably shorter.

Genitalia (Figs 25B,C, 27B-D) with large spermathecae and relatively long insemination ducts.

Leg spination. mI: p1-1, r1-1; mII: p0-1.

Dimensions. CL 2.83-3.63 (3.22), CW 1.65-1.98 (1.82), CW/CL 0.54-0.61 (0.58), EFL 0.79-0.89 (0.83), EFL/CL 0.23-0.29 (0.26), AEW 1.14-1.44 (1.29), PEW 1.14-1.48 (1.31), AL 4.35-4.81 (4.58).

Holoplatys strzeleckii n.sp.

Figs 28-29, Map 5

Material examined. South Australia: HOLOTYPE, male, ALLOTYPE, female, PARATYPES, juvenile, 5 km south of Mylor, 20 Jan. 1980, A.D. Austin, QMB S3585; 2 females, Mylor, 18 June 1979, QMB S3575, S3577; female, 5 km south of

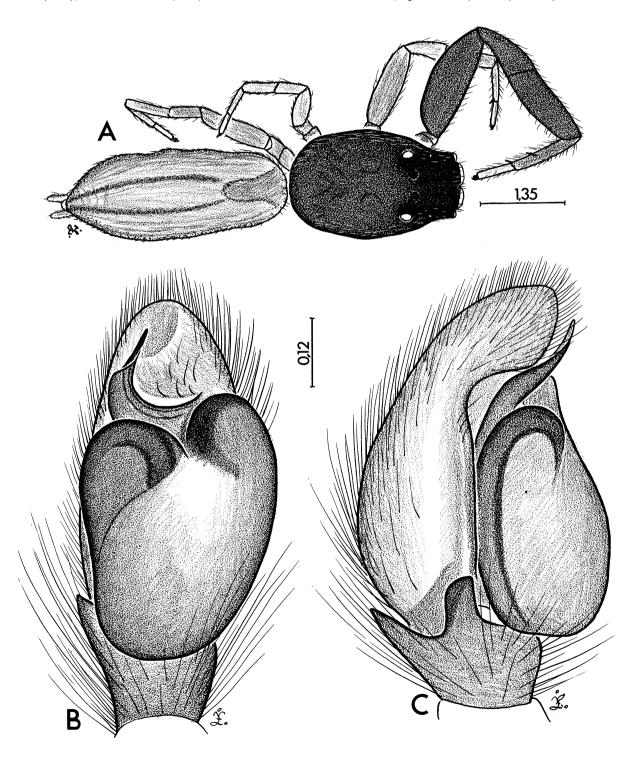


Fig.24. Holoplatys planissima, male (syntype).

Mylor, 8 June 1980, A.D. Austin, AMS KS10527; 3 females, same data, AMS KS19452; 3 females, 3 km south of Mylor, 20 Jan. 1980, A.D. Austin, QMB S3590; 2 females, Snow Gum Reserve, Caroline Forest, under *Eucalyptus* bark, 20 Apr. 1979, D. Lee, SAMA N1988343-4; 3 females, Roachdale Natural Trust Reserve, near Williamstown, 8 Aug. 1980,

J.J.H., M.L. Szent-Ivany, SAMA N1988345-7; female, Sellicks-Aldinga Scrub, under bark, 15 Sept. 1987, D. Hirst, SAMA N1988341; female, Kangaroo Island, Rocky River Waterhole, 3-4 Dec. 1982, J. Pennington, M. Bennett, SAMA N1988342; female, Lofty Range Mountains, Loftia Park, under bark of *Eucalyptus*, 25 Mar. 1984, R.V. Southcott, SAMA N1988340.

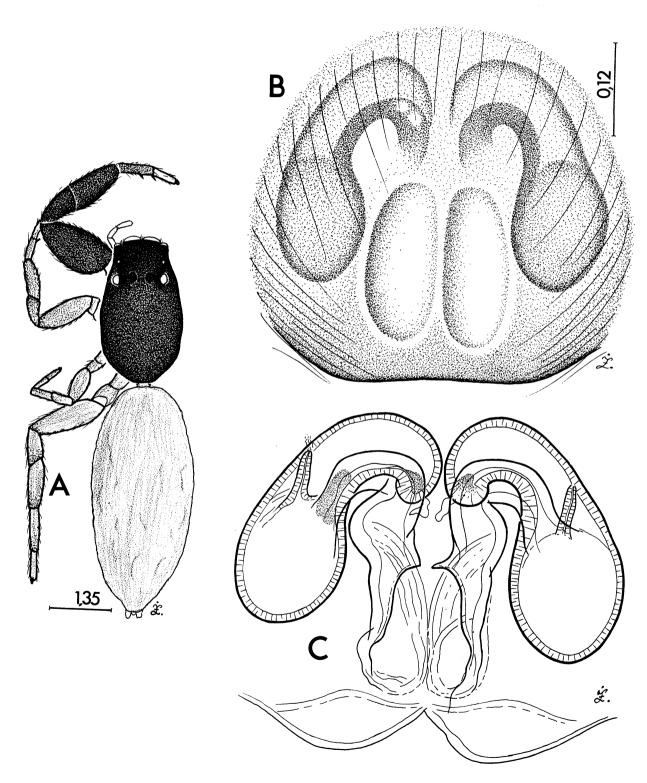


Fig.25. Holoplatys planissima, female (syntype).

Tasmania: PARATYPE, male, Devonport, 18 Feb. 1983, A. Webber, TMH J195.

Etymology. The specific name is proposed in honour of Polish naturalist and explorer John Paul Strzelecki.

Diagnosis. Dark abdominal stripe very distinctive,

numerous white hairs on lateral surfaces of cephalothorax, tegulum with well marked depression.

Male (Fig.28A). Eye field black-brown, thorax brown. Marginally numerous white hairs. Abdomen with anterior scutum and dark median stripe on beige background. Spinnerets grey-brown. Clypeus black with white hairs. Chelicerae dirty-orange, maxillae,

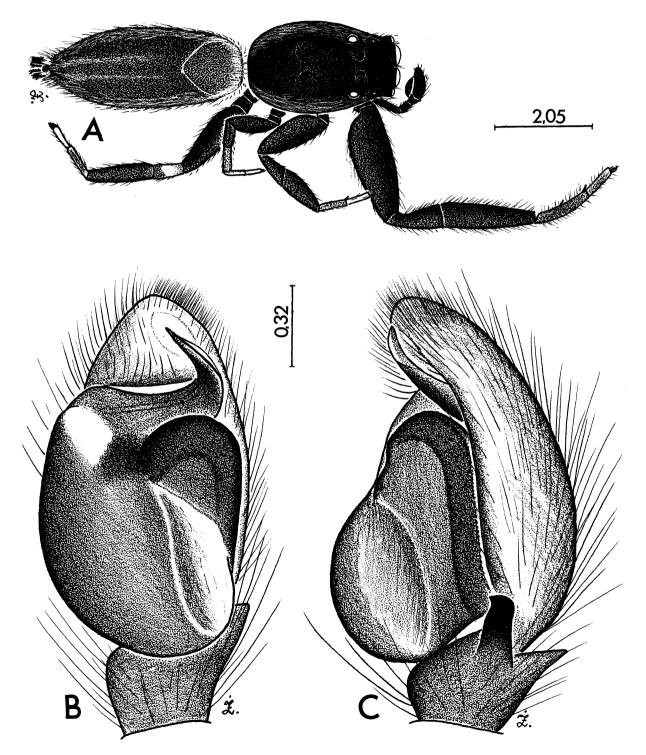


Fig.26. Holoplatys planissima, male from Lake Broadwater.

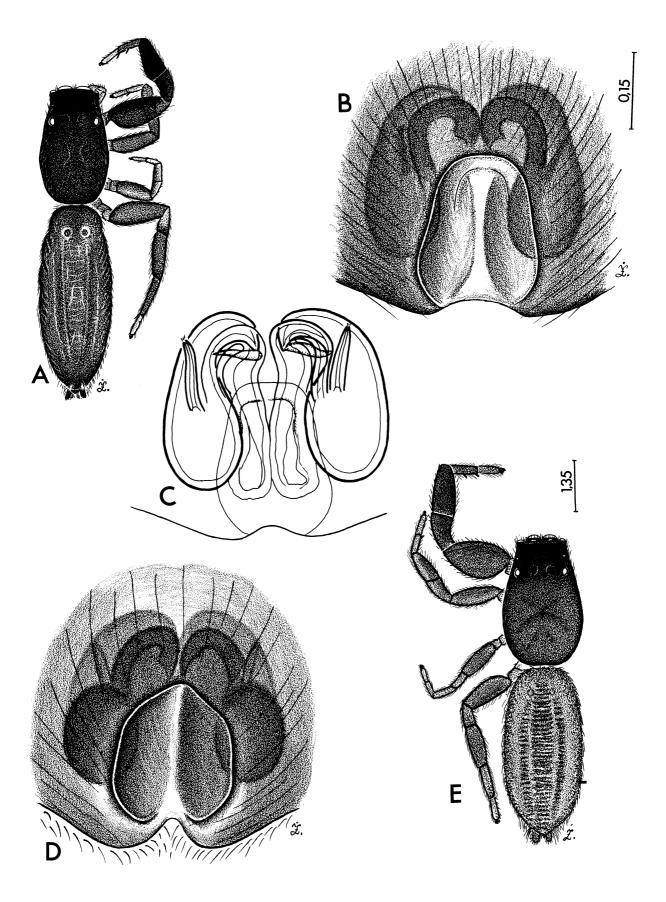


Fig.27. Holoplatys planissima, females from Lake Broadwater.

labium and sternum dark-orange. Venter beige centrally, darker laterally. Legs I long, brown, other legs slightly lighter.

Palpal organ (Fig.28B,C) very similar to *planissima* but depression on tegulum surface better marked.

Leg spination. mI: p1-1, r1-1; mII: p0-1.

Dimensions. CL 2.31-2.57 (2.44), CW 1.51-1.83 (1.67), CW/CL 0.65-0.71 (0.68), EFL 0.73-0.79 (0.76), EFL/CL 0.31, AEW 0.99-1.12 (1.05), PEW 1.12-1.15 (1.13), AL 2.90-3.30 (3.10).

Female (Fig.29A). Cephalothorax coloured as in

male. Abdomen with dark central and lateral pattern. The rest grey to beige. Clypeus dark-grey to black with single dark hairs. Chelicerae brown. Maxillae and labium dirty-brown with lighter tips, sternum dirty-orange to brown with darker edges. Venter beige to grey. Leg I brown, lighter dorsoventrally and distally, other legs slightly lighter.

Genitalia (Fig.29B,C) very similar to *planissima* but depression of epigyne less distinctive.

Leg spination. mI: p1-1, r1-1; mII: p0-1.

Dimensions. CL 2.77-3.43 (3.05), CW 1.85-2.18 (2.00), CW/CL 0.61-0.65 (0.64), EFL 0.79-0.92 (0.86),

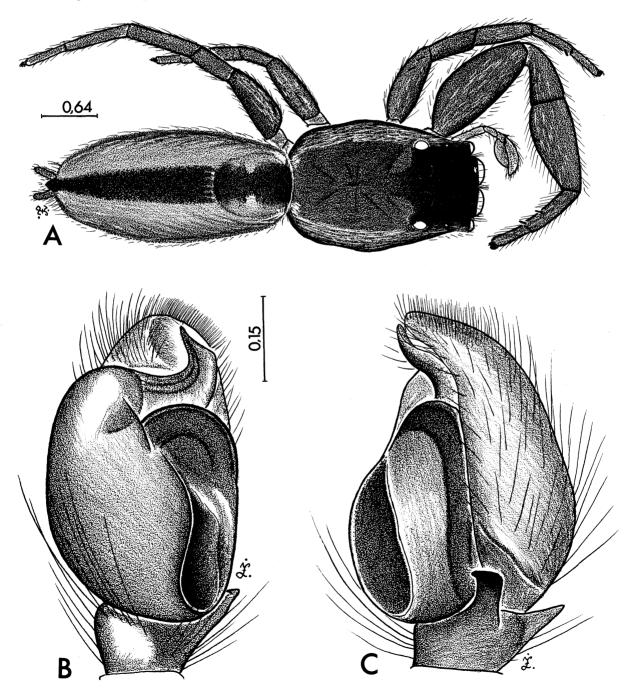


Fig.28. Holoplatys strzeleckii, male (paratype) from Mylor area.

EFL/CL 0.26-0.31 (0.28), AEW 1.13-1.33 (1.23), PEW 1.22-1.45 (1.34), AL 4.22-4.68 (4.37).

Holoplatys tasmanensis n.sp.

Fig.30, Map 5

Material examined. Tasmania: HOLOTYPE, female,

Andrew River, peeling bark of tea tree, 23 Mar. 1988, M. Gray, AMS KS19315; PARATYPES, 2 juveniles, same data, AMS KS19316.

Diagnosis. Species closely related to *strzeleckii* but dark abdominal stripe less distinctive, clypeus fringed, and accessory glands much shorter.

Male. The male is unknown.

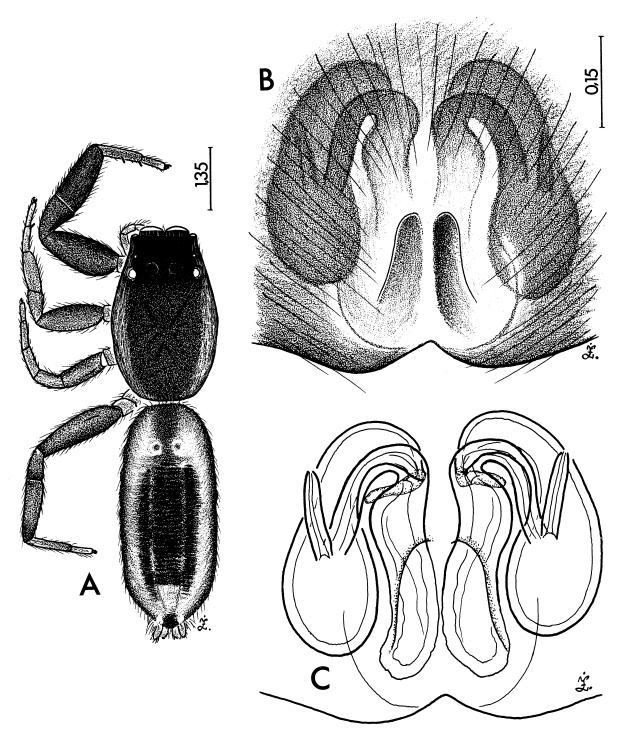


Fig.29. Holoplatys strzeleckii, female (allotype).

Female (Fig.30A). Eye field black. Thorax dirty light-brown medially, laterally lighter with white hairs. Abdomen yellowish with dark-grey median belt. Spinnerets yellow-grey. Clypeus blackish, fringed with short white hairs. Chelicerae dark-brown, maxillae and labium brown, the first with light tips. Labium brownish, sternum dirty-brownish. Venter yellow. Legs I laterally brown, dorsoventrally lighter. Other legs yellow.

Genitalia (Fig.30B,C) similar to related species. Spermathecae rather elongated, accessory glands thin.

Leg spination. mI: p1-1, r1-1; mII: p0-1.

Dimensions. CL 2.70, CW 1.71, CW/CL 0.63, EFL 0.79, EFL/CL 0.29, AEW 1.15, PEW 1.18, AL 4.45.

Holoplatys fusca (Karsch) n.comb. Figs 31-34, Map 5

Marpissa fusca Karsch, 1878: 28. Ocrisiona fusca.—Rainbow, 1911: 291.

Material examined. New South Wales: SYNTYPE, male,

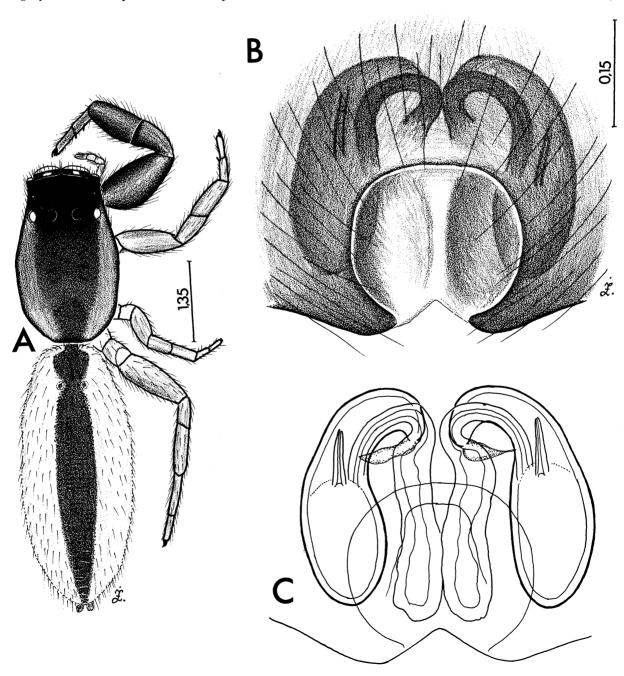


Fig.30. Holoplatys tasmanensis, female (holotype).

ZMB 1620. Queensland: 2 females, Brisbane, Rochedale State Forest, beating, bark, 2-17, 31 Jan. 1980, V. Davies, R. Raven, QMB S3552, S3557. South Australia: male, Cleland N.P., off flowering plants, 7 Oct. 1975, G. Crook, P. Christie, SAMA N1988351; 2 females, Roachdale Natural Trust Reserve, near Williamstown, 9 Aug. 1980, J.J.H., M.L. Szent-Ivany, SAMA N1988348-9: female, Marble Hill, under *Eucalyptus* bark with egg sac, 19 Nov. 1978, A.F. Lees, SAMA N1988350; female, 5 km south of Mylor, 8 June 1980, A.D. Austin, AMS KS10527; male, Kangaroo Island, Flinders

Chase, from side of Rocky River along Shackles Road, 29 Mar. 1979, W. Zeidler, A. Gackle, SAMA N1988354; female, Kangaroo Island, Ravine de Casoars, 6 Nov. 1987, D. Hirst, SAMA N1988353; male, Kangaroo Island, 10-15 Jan. 1986, O.F. Clarke, SAMA N1988352. Western Australia: female, juvenile, Lake Indoon, under *Eucalyptus* bark, 20 Sept. 1988, M. Zabka, WAMP 88/2384-5; female, Mundaring Weir, IV.1963, J. Dell, WAMP 88/26; female, Moons Crossing, Warren River, site 34, beneath Karri bark, 27 Jan. 1986 (FS4), G. Harold, WAMP 89/305.

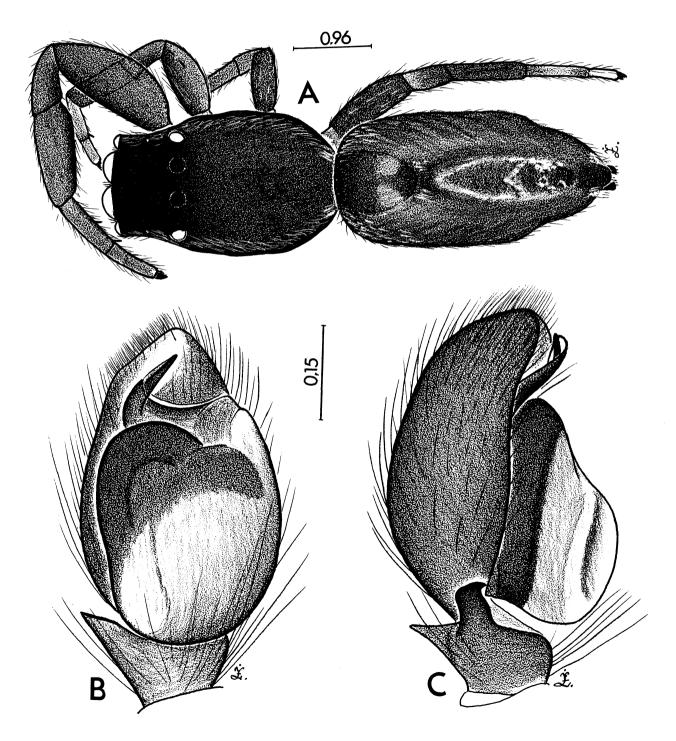


Fig.31. Holoplatys fusca, male (syntype).

Diagnosis. Species can be recognised by leg spination, fringed clypeus in both sexes and shape of lateral tibial apophysis.

Male (Fig.31A). Eye field brown-black, thorax brown,

marginally darker with white hairs. Abdomen dark, with anterior scutum, central herring-bone pattern and white marginal hairs. Clypeus black-brown with fringe of short white hairs. Chelicerae brown with transverse stripe of white hairs. Maxillae and labium brown, sternum lighter,

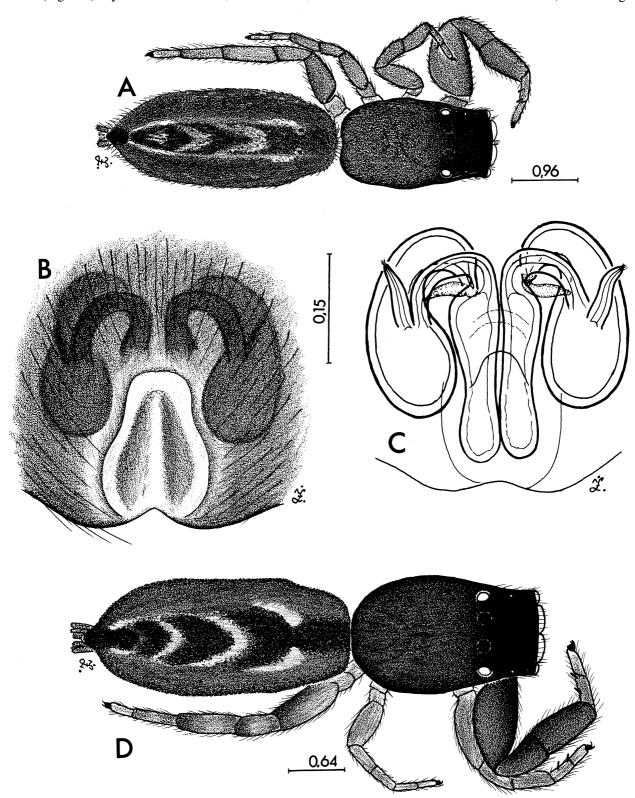


Fig.32. Holoplatys fusca, female (A-C Roachdale Nature Reserve, D Kangaroo Island).

dirty-brown. Venter with light median belt, darker laterally. Legs I brown, others lighter, all legs darker laterally and around joints.

Palpal organ (Fig.31B,C) similar to other representatives of the group but lateral tibial apophysis more curved.

Leg spination. mI: p1-1, r1-1; mII: p0-1 or p1-1.

Dimensions. CL 2.07-2.26 (2.15), CW 1.27-1.48 (1.36), CW/CL 0.61-0.65 (0.62), EFL 0.62-0.68 (0.65), EFL/CL 0.29-0.31 (0.30), AEW 0.93-1.02 (0.96), PEW 0.96-1.05 (1.00), AL 2.48-2.79 (2.58).

Female (Figs 32A,D, 33A, 34A). Dorsal aspect and clypeus similar to that in male, lateral hairs on

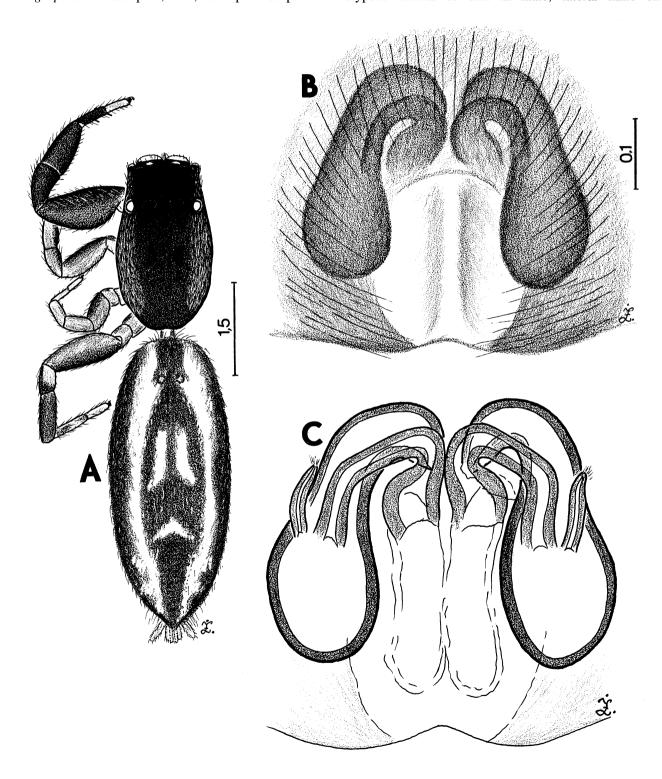


Fig.33. Holoplatys fusca, female from Geraldton area.

cephalothorax less numerous, abdomen without scutum. Chelicerae brown, pedipalps dirty-yellow, maxillae and labium dirty-brown, sternum orange with brown margin. Venter as in male. Legs coloured as in male, first ones relatively shorter.

Genitalia (Figs 32B,C, 33B,C, 34B,C) almost identical to other species of the group.

Leg spination. mI: p1-1, r1-1; mII: p0-1 or p1-1.

Dimensions. CL 1.84-2.37 (2.15), CW 1.15-1.45 (1.30), CW/CL 0.59-0.61 (0.60), EFL 0.59-0.75 (0.65), EFL/CL 0.29-0.32 (0.30), AEW 0.89-1.05 (0.96), PEW 0.89-1.06 (0.98), AL 2.37-3.56 (3.00).

The female in the Berlin Collection (ZMB 1621) represents another genus, confirming doubts expressed by Karsch (1878).

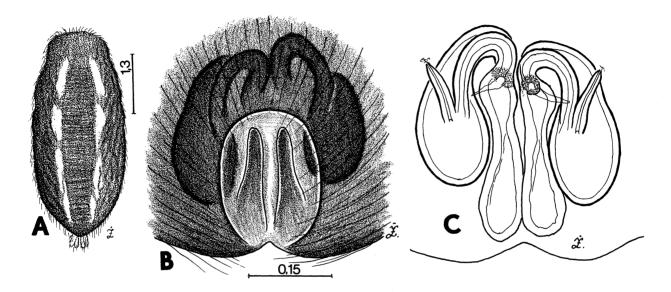
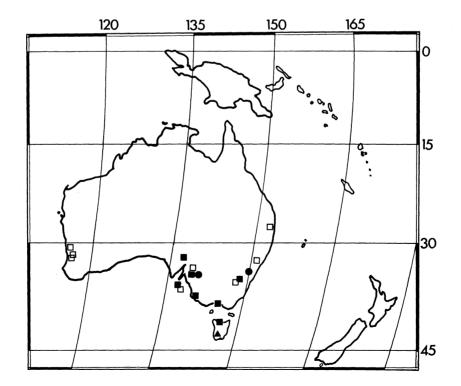


Fig.34. Holoplatys fusca, female from Mundaring Weir.



Map 5. Open square – H. fusca (Karsch); closed circle – H. mascordi n.sp.; closed square – H. strzeleckii n.sp.; closed triangle – H. tasmanensis n.sp.

Holoplatys pemberton n.sp.

Figs 35-36, Map 4

Material examined. Western Australia: HOLOTYPE, male, Pemberton, under Karri bark, 20 Jan. 1943, WAMP 88/31; ALLOTYPE, female, Tenindewa, July 1926, 'Senex', WAMP 26/336.

Diagnosis. Cephalothorax without white lateral hairs,

abdomen with herring-bone pattern, anterior scutum slightly visible. Clypeus fringed, with short, white hairs. Posterior edge of epigyne indented, central depression rather small, spermathecae and insemination ducts long.

Male (Fig.35A). Eye field brown with 2 darker central patches, thorax generally orange, dirty medially and marginally. Abdomen macerated, with traces of central herring-bone pattern and slightly visible anterior scutum. Spinnerets yellowish. Clypeus dirty-orange with fringe

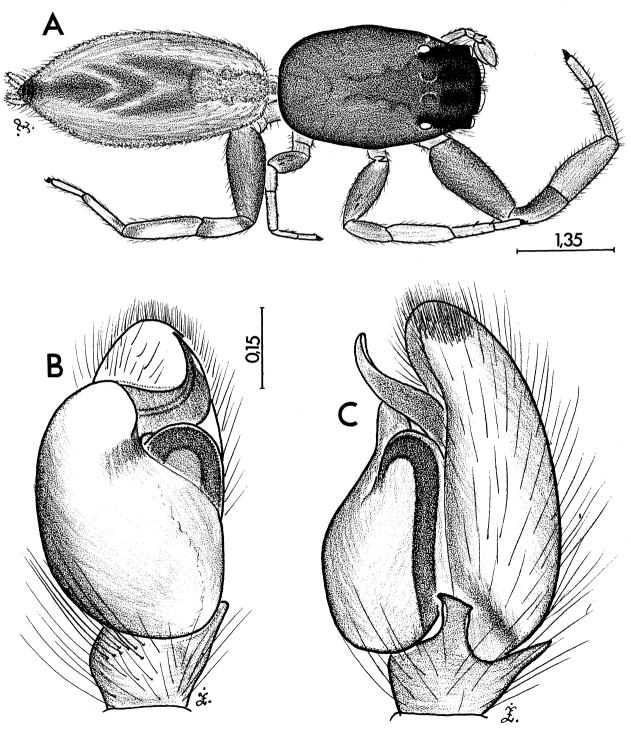


Fig.35. Holoplatys pemberton, male (holotype).

of whitish short hairs. Chelicerae and sternum dirtyorange, maxillae and labium orange. Venter light-grey. Legs orange, lighter distally, dirty laterally and around joints.

Palpal organ (Fig.35B,C) typical for the group. Tegulum without distinct depression, lateral tibial apophysis hooked. *Leg spination*. mI: p1-1, r1-1; mII: p1-1.

Dimensions. CL 2.77, CW 1.72, CW/CL 0.62, EFL 0.79, EFL/CL 0.28, AEW 1.15, PEW 1.18, AL 3.56.

Female (Fig.36A). Colour pattern similar to the male. Epigyne (Fig.36B,C) indented posteriorly, central depression smaller than in other species. Insemination

ducts and spermathecae relatively long.

Leg spination. mI: p1-1, r1-1; mII: p1-1.

Dimensions. CL 2.22, CW 1.45, CW/CL 0.59, EFL 0.72, EFL/CL 0.29, AEW 1.05, PEW 1.09, AL 3.03.

Holoplatys mascordi n.sp.

Fig.37, Map 5

Material examined. New South Wales: HOLOTYPE, male, Rivatts Creek, 8 Dec. 1966, R. Mascord, AMS KS18813;

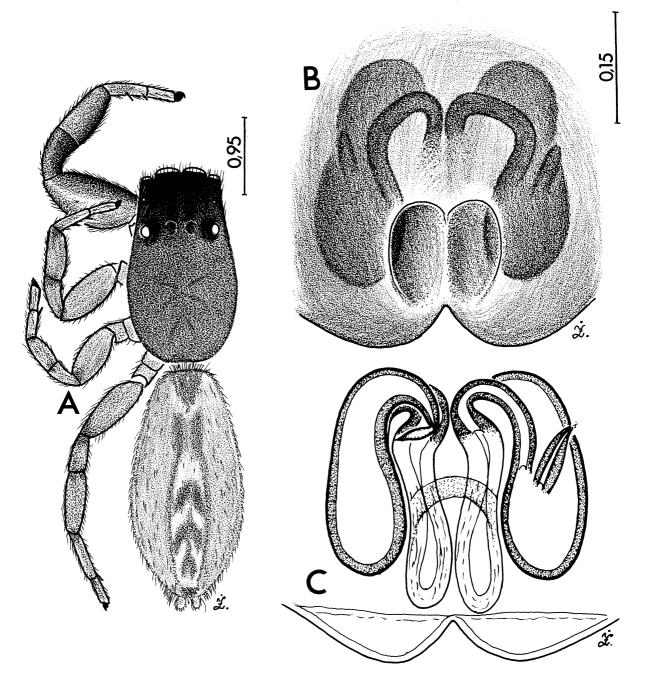


Fig.36. Holoplatys pemberton, female (allotype).

ALLOTYPE, female, same data, AMS KS19142; PARATYPES, male, female, same data, AMS KS1914, KS18814. South Australia: PARATYPE, male, 5 km south of Mylor, A.D. Austin, QMB S3592.

Etymology. The specific name is proposed in honour of Ramon Mascord, Australian naturalist and arachnologist.

Diagnosis. Embolus of palpal organ slightly longer and insemination ducts much longer than in other species of the group. Spermathecae and their accessory glands small.

Male (Fig.37A). Eye field brown with darker surroundings of eyes and 2 dark central spots. Thorax light-brown to brown with marginal white hairs. Abdomen

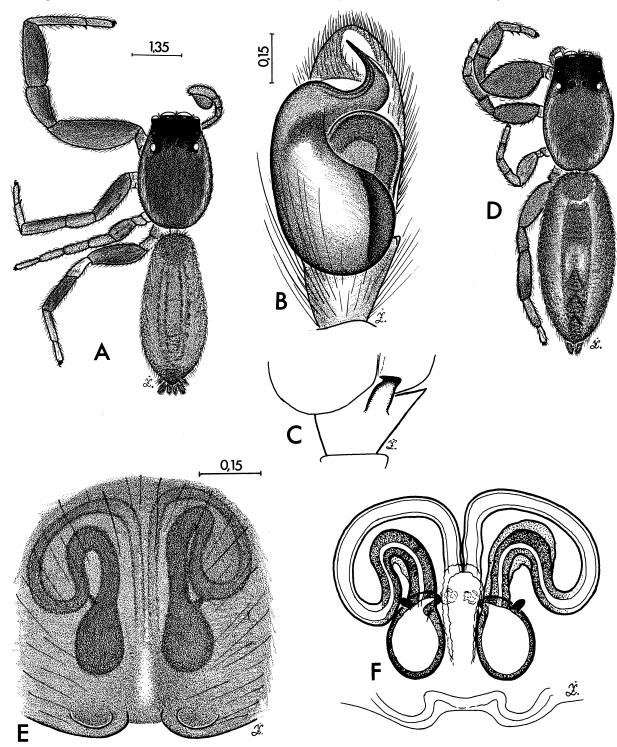


Fig.37. Holoplatys mascordi, A-C male (holotype), D-F female (allotype).

beige to grey with darker pattern along its central part. Anterior scutum slightly visible. Spinnerets grey. Clypeus brown with single grey hairs. Chelicerae brown, maxillae and labium honey-yellow, sternum orange with darker margin, venter beige. Legs I orange-brown to brown, long. Other legs generally lighter, darker laterally.

Palpal organ (Fig.37B,C) similar to other species of the group but embolus longer.

Leg spination. mI: p1-1, r1-1; mII: p0-1.

Dimensions. CL 2.95-3.23 (3.11), CW 1.81-2.11 (1.98), CW/CL 0.61-0.66 (0.63), EFL 0.82-0.92 (0.87), EFL/CL 0.27-0.29 (0.28), AEW 1.19-1.32 (1.27), PEW 1.22-1.38 (1.30), AL 3.82-4.09 (3.91).

Female (Fig.37D). Colour pattern generally similar to

the male. Abdomen with traces of herring-bone pattern and slightly visible anterior scutum. Spinnerets dark-grey. Clypeus blackish with single grey hairs. Chelicerae dark-brown, pedipalps lighter. Maxillae and labium brown, sternum lighter with darker margin. Venter grey. Legs I orange to brown, distally and dorsoventrally lighter, other legs lighter.

Genitalia (Fig.37E-F) with very long insemination ducts, their distal parts more sclerotised. Spermathecae and accessory glands small.

Leg spination. mI: p1-1, r1-1; mII: p0-1.

Dimensions. CL 2.57-3.03 (2.80), CW 1.65-1.95 (1.80), CW/CL 0.64, EFL 0.72-0.79 (0.75), EFL/CL 0.26-0.28 (0.27), AEW 1.06-1.18 (1.12), PEW 1.06-1.18 (1.12), AL 3.56-4.62 (4.11).

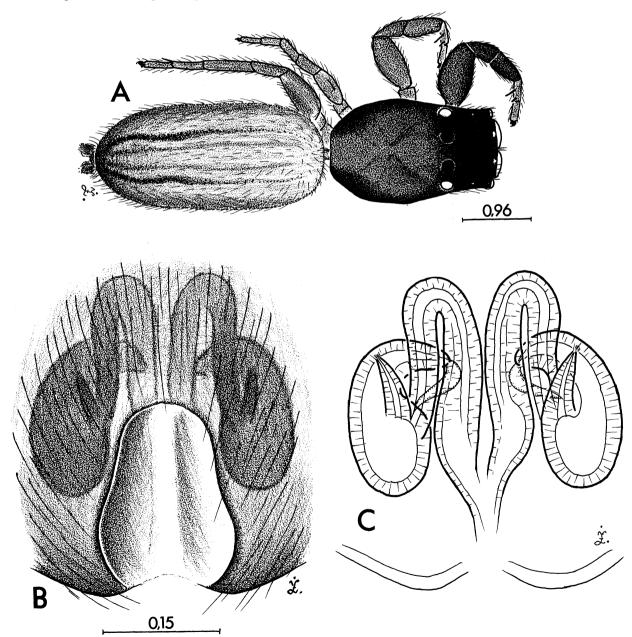


Fig.38. Holoplatys braemarensis, female (holotype).

Holoplatys braemarensis n.sp.

Fig.38, Map 4

Material examined. Queensland: HOLOTYPE, female, PARATYPE, female, Braemar State Forest, litter, 4-8 Feb. 1980, R. Raven, QMB S3584.

Diagnosis. Cephalothorax coriaceous on eye field, its sides much darker than dorsal part. Proximal spines on metatarsus I and II twice as long as distal ones.

Male. The male is unknown.

Female (Fig.38A). Eye field coriaceous dark-brown, lateral surfaces of cephalothorax of the same colour, median part of thorax orange-brown. Abdomen lightgrey, darker posteriorly with longitudinal darker stripes. Spinnerets dark-grey. Clypeus dark-brown with single blackish and whitish hairs. Maxillae and labium dark-brown, the first with light tips, sternum dark-orange with

brown margin, venter grey. Legs I dark-brown proximally, metatarsus and tarsus lighter. Other legs lighter.

Genitalia (Fig. 38B,C). Insemination ducts longer than in other species of the group.

Leg spination. mI: p1-1, r1-1; mII: p1-1, r1-0.

Dimensions. CL 2.57-2.59 (2.58), CW 1.58-1.65 (1.61), CW/CL 0.61-0.63 (0.62), EFL 0.74, EFL/CL 0.28, AEW 1.20-1.22 (1.21), PEW 1.28-1.32 (1.30), AL 2.97-3.56 (3.26).

Holoplatys julimarina n.sp.

Fig.39, Map 4

Material examined. Western Australia: HOLOTYPE, female, PARATYPE, juvenile, Julimar State Forest, north-east Perth, under *Eucalyptus* bark, 19 Sept. 1988, M. Zabka, WAMP 88/2382-3.

Diagnosis. Insemination ducts very long, forming

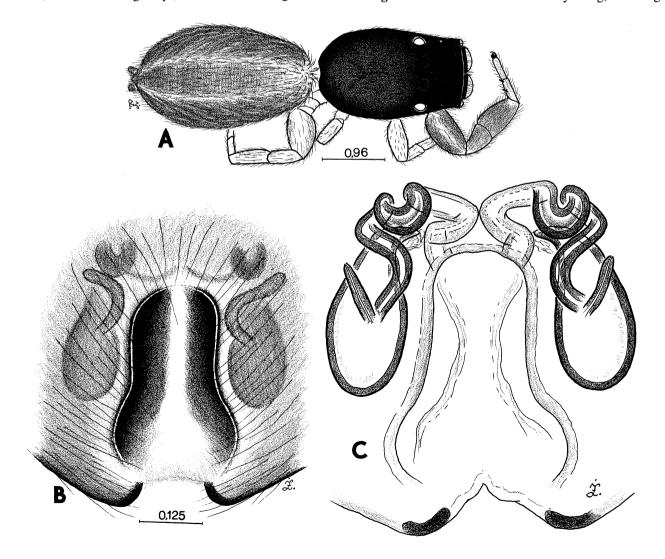


Fig.39. Holoplatys julimarina, female (holotype).

several loops.

Male. The male is unknown.

Female (Fig.39A). Eye field black, thorax slightly lighter, abdomen macerated, dark-grey, probably lighter medially, spinnerets dark-grey. Clypeus black, chelicerae dark-brown, pedipalps honey-yellow, maxillae and labium dark-brown with lighter tips. Sternum dirty-orange, venter beige. Legs I orange-brown, others successively lighter.

Epigyne (Fig.39B,C) with large central depression, insemination ducts very long, forming several loops.

Leg spination. mI: p1-1, r1-1; mII: p1-1.

Dimensions. CL 2.35, CW 1.43, CW/CL 0.60, EFL 0.75, EFL/CL 0.31, AEW 1.10, PEW 1.15, AL 2.85.

The grassalis Group

The group consists of eight species (one of them described as incertae sedis), spread from subtropical Queensland, through New South Wales, South Australia and Western Australia. Body size tiny to medium (2.23-4.89), some of them with transverse spots of white hairs on abdomen surface. Tegulum of palpal organ oval, dorsal apophysis on tibia present. Species included: grassalis, chudalupensis, desertina, daviesae, dejongi, kalgoorlie, embolica, lhotskyi.

Holoplatys grassalis n.sp.

Fig.40, Map 6

Material examined. Western Australia: HOLOTYPE, male, Grass Patch, house verandah, 29 Sept. 1983, A.F. Longbottom, WAMP 88/6.

Diagnosis. Relatively large, abdomen rather short, clypeus and chelicerae with clusters of light hairs. Tibial apophyses of palpal organ relatively small, pointed.

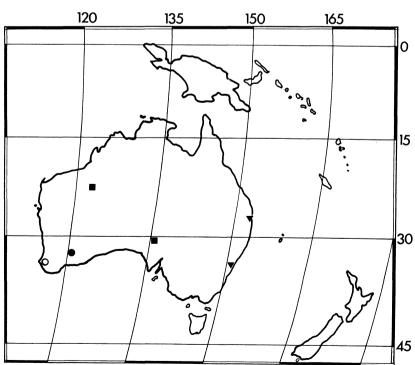
Male (Fig.40A). Eye field black. Thorax brown, lighter around fovea, darker marginally. Abdomen with indistinct dirty-orange anterior scutum and herring-bone median pattern. Spinnerets black. Clypeus brown-black with short scale-like hairs in the middle and with fringe of silver hairs. Chelicerae dirty-brown with tufts of silver hairs. Maxillae and labium greyish-brown with lighter tips, sternum orange, marginally darker with white hairs. Venter grey centrally, darker laterally and posteriorly with longitudinal light stripes. Legs I long, dirty-brown, tarsus yellow, patella and tibia fringed. Other legs generally lighter, darker laterally and around joints.

Palpal organ (Fig.40B,C). Embolus shorter than in other representatives of the group.

Leg spination. mI: p1-1, r1-1; mII: p1-1.

Dimensions. CL 2.22, CW 1.62, CW/CL 0.72, EFL 0.76, EFL/CL 0.34, AEW 1.15, PEW 1.16, AL 2.67.

Female. The female is unknown.



Map 6. Open circle – Holoplatys chudalupensis n.sp.; closed inverted triangle – H. daviesae n.sp.; closed square – H. desertina n.sp.; closed circle – H. grassalis n.sp.

Holoplatys chudalupensis n.sp.

Fig.41, Map 6

Material examined. Western Australia: HOLOTYPE, male, on top of Mount Chudalup, 3 Apr. 1988, J.M. Waldock, WAMP 88/21.

Diagnosis. Cephalothorax bicoloured, abdomen

dark, clypeus fringed, distal segments of legs (except legs III) black.

Male (Fig.14A). Eye field black, thorax orange, darker around lower margins. Abdomen with anterior dirty-brown scutum and lateral fringes of white hairs, posteriorly almost black with light irregular pattern. Spinnerets black. Clypeus brown with fringe of white short hairs. Chelicerae dirty-

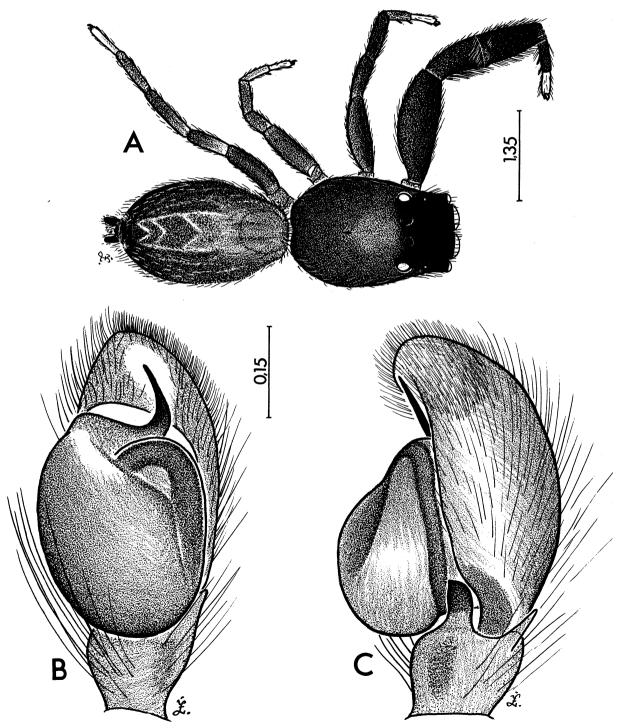


Fig.40. Holoplatys grassalis, male (holotype).

yellow, maxillae, labium and sternum yellow. Venter dirty-beige anteriorly, posteriorly and laterally darker. Coxa, trochanter and proximal femur of legs I yellow, other segments black. Patellae, tibiae and metatarsi II and IV black, other segments yellow. Legs III yellow.

Palpal organ (Fig.41B,C). Embolus long, wavy distally, tegulum relatively small.

Leg spination. mI: p1-1, r1-1.

Dimensions. CL 1.40, CW 0.90, CW/CL 0.64, EFL 0.45, EFL/CL 0.32, AEW 0.77, PEW 0.77, AL 1.25.

Female. The female is unknown.

Holoplatys desertina n.sp.

Fig.42, Map 6

Material examined. South Australia: HOLOTYPE, female, 175 km west Vokes Hill Corner, Great Victoria Desert, under bark of *Eucalyptus concinna*, 29 Aug. 1980, G.J. Baker, SAMA N1988337. Western Australia: PARATYPE, female, Rudall River camp, river gums, 17 July 1988, A.E. de Jong, Wamp 89/285.

Diagnosis. Abdomen wider than in other species. Insemination ducts meandering.

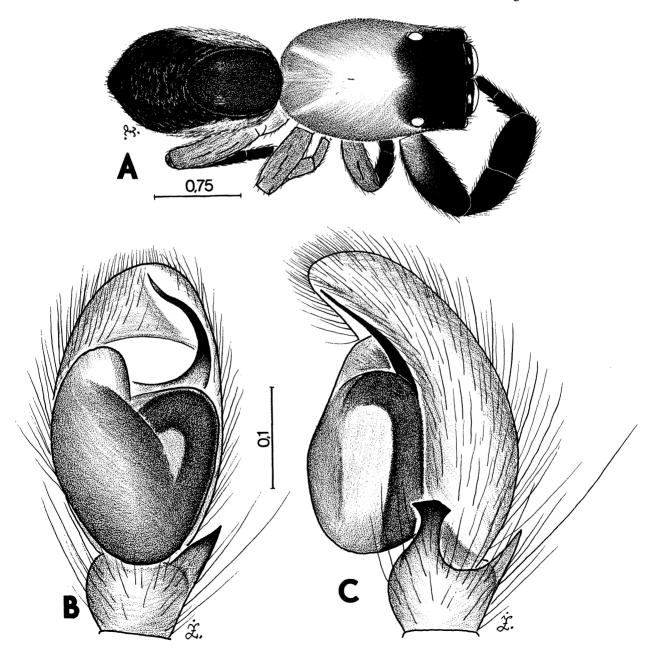


Fig.41. Holoplatys chudalupensis, male (holotype).

Male. The male is unknown.

Female (Fig.42A). Eye field black, thorax brown, dirty marginally. Abdomen grey-brown, lighter medially and anteriorly with pale transverse stripes. Spinnerets grey-brown. Clypeus black-brown, chelicerae, maxillae, labium and sternum dirty-orange. Venter beige centrally, dark-grey laterally. Legs yellow-orange.

Genitalia (Fig.42B,C) with long, meandering insemination ducts, accessory glands long and thin.

Leg spination. mI: p1-1, r1-1; mII: p0-1.

Dimensions. CL 1.45, CW 0.86, CW/CL 0.59, EFL 0.49, EFL/CL 0.34, AEW 0.71, PEW 0.74, AL 2.04.

Holoplatys daviesae n.sp.

Fig.43, Map 6

Material examined. Queensland: HOLOTYPE, male, Brisbane, dry *Eucalyptus* forest, under bark, Aug.-Sept. 1987, M. Zabka, AMS KS20586; ALLOTYPE, female, same data, KS20587; PARATYPE, male, same data, KS20584. New South Wales: PARATYPES, male, female, Bargo, on tree trunk, 24 Oct. 1987, M. Zabka, AMS KS20585.

Etymology. The specific name is proposed in honour of Dr Valerie Todd Davies, Australian arachnologist, honorary associate at Queensland Museum, Brisbane.

Diagnosis. Similar to dejongi but palpal organ more

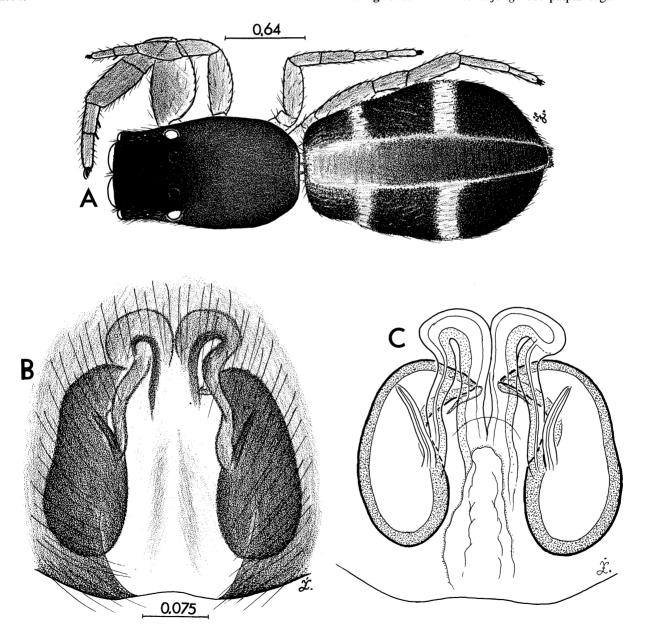


Fig.42. Holoplatys desertina, female (holotype).

delicate, tegulum smaller and embolus shorter.

Male (Fig.43A). Cephalothorax rather wide, generally dark, slightly lighter on eye field, with scattered white hairs. Abdomen dark-grey, Clypeus and chelicerae dark-brown. Maxillae, labium and sternum lighter, venter light to grey. Legs I brown, laterally darker, distally lighter, tarsi and metatarsi yellow. Other legs generally lighter.

Palpal organ (Fig.43B,C). Tegulum smaller than in

the related *dejongi*, also lateral tibial apophysis and embolus of different shape.

Leg spination. mI: p1-1, r1-1; mII: p0-1.

Dimensions. CL 1.40-1.95 (1.62), CW 0.95-1.33 (1.07), CW/CL 0.62-0.67 (0.65), EFL 0.46-0.65 (0.53), EFL/CL 0.31-0.33 (0.32), AEW 0.62-0.85 (0.73), PEW 0.66-0.85 (0.75), AL 1.75-2.55 (2.15).

Female. Body form and colour pattern similar to the male, only abdominal scutum absent and legs lighter.

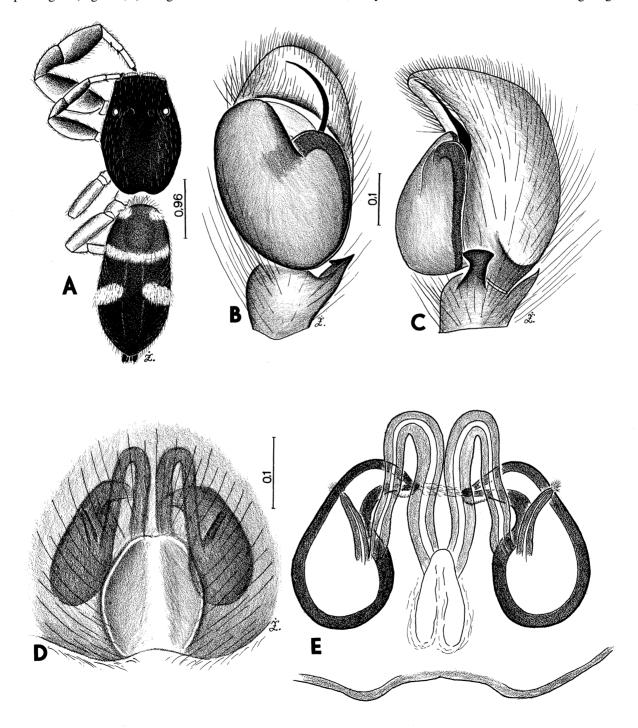


Fig.43. Holoplatys daviesae, A-C male (holotype), D,E female (allotype).

Genitalia (Fig.43D-E) with long insemination ducts, accessory glands long, curved laterally.

Leg spination. mI: p1-1, r1-1; mII: p0-1. Dimensions. CL 1.56-1.75 (1.65), CW 0.92-1.15 (1.04), CW/CL 0.59-0.65 (0.62), EFL 0.47-0.55 (0.51), EFL/CL 0.30-0.31 (0.31), AEW 0.80, PEW 0.84, AL 2.20.

Holoplatys dejongi n.sp.

Fig.44, Map 7

Material examined. Western Australia: HOLOTYPE, male, Parmelia, near Kwinana, 2 Oct. 1987, A.E. de Jong,

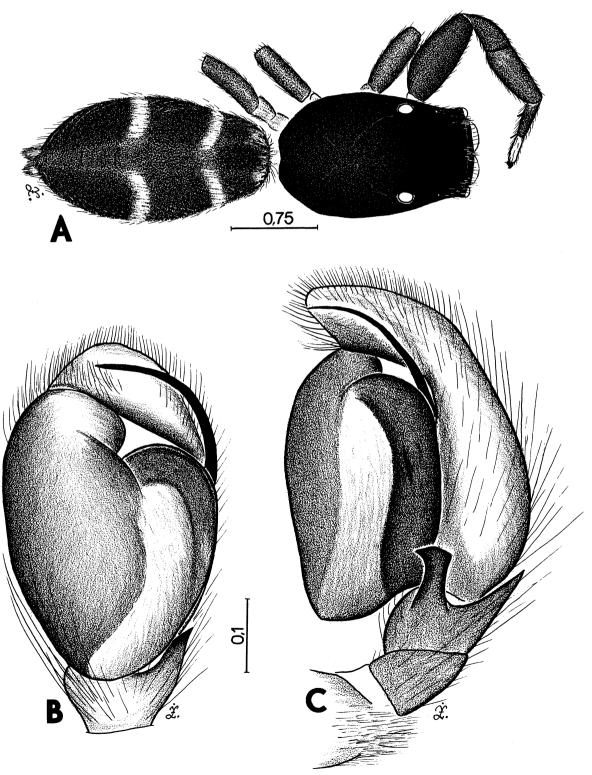


Fig.44. Holoplatys dejongi, male (holotype).

WAMP, 88/2155; PARATYPES, 2 males, 5 km west Lake Indoon, under *Eucalyptus* bark, 20 Sept. 1988, D. Knowles, M. Zabka, WAMP 88/2386-7.

Etymology. The specific name is proposed in honour of Mr Aris E. de Jong, naturalist from Western Australia, collector of many specimens described in this paper.

Diagnosis. Similar to *daviesae* but tegulum larger, embolus thicker and longer.

Male (Fig, 44A). Cephalothorax almost black. Abdomen dark-grey with broken transverse stripes of white hairs. Spinnerets dark. Clypeus dark, chelicerae dirty-grey, maxillae and labium slightly lighter, sternum dirty-brown, venter light centrally, laterally darker. Legs I grey-brown only tarsi lighter, also other legs generally lighter, especially their dorsoventral parts.

Palpal organ (Fig.44B,C) with massive tegulum, long embolus and femoral distal brush of white hairs.

Leg spination. mI: p1-1, r1-1.

Dimensions. CL 1.25-1.45 (1.35), CW 0.85-0.95 (0.89), CW/CL 0.65-0.68 (0.66), EFL 0.41-0.41 (0.43), EFL/CL 0.31-0.33 (0.32), AEW 0.62-0.70 (0.66), PEW 0.67-0.75 (0.70), AL 1.60-1.85 (1.68).

Female. The female is unknown.

Holoplatys kalgoorlie n.sp.

Fig.45, Map 7

Material examined. Western Australia: HOLOTYPE, male, PARATYPE, juvenile, Kalgoorlie, Mar. 1968, WAMP 88/15-16.

Diagnosis. Small spider (male less than 3.5 mm), colour pattern generally lighter than in other representatives of the group, lateral tibial apophysis of different shape.

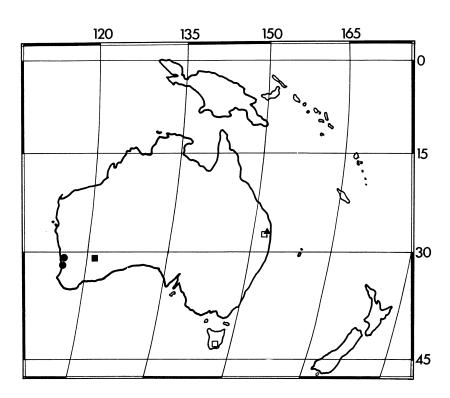
Male (Fig.45A). Eye field dark with 2 black spots, thorax pale-brown with dirty-brown margin. Anterior part of abdomen more sclerotised with light and grey pattern. Spinnerets yellowish. Clypeus blackish with single dark-grey hairs. Chelicerae dirty-brown, pedipalps pale-orange. Maxillae, labium and sternum honey-yellow, sternum lighter with darker margin, venter beige. Legs I dirty-orange-brown, darker prolaterally and around joints, legs II and III dirty-yellow.

Palpal organ as illustrated in Figure 45B,C.

Leg spination. mI: p1-1, r1-1; mII: p0-1.

Dimensions. CL 1.48, CW 1.02, CW/CL 0.68, EFL 0.53, EFL/CL 0.36, AEW 0.72, PEW 0.76, AL 1.92.

Female. The female is unknown.



Map 7. Closed circle – Holoplatys dejongi n.sp.; closed triangle – H. embolica n.sp.; closed square – H. kalgoorlie n.sp.; open square – H. lhotskyi n.sp.

Holoplatys embolica n.sp.

Fig.46, Map 7

Material examined. Queensland: HOLOTYPE, male, Brisbane, Rochedale S.F., under bark, 7 Oct. 1980, V. Davies, R. Raven, QMB S3553.

Diagnosis. Tiny spider, tegulum as wide as long, embolus long, thick and curved, tibial apophysis coneshaped more like *planissima* group.

Male (Fig.46A). Eye field almost black, thorax dirty-honey, darker centrally and marginally. Abdomen damaged with anterior scutum and black and orange

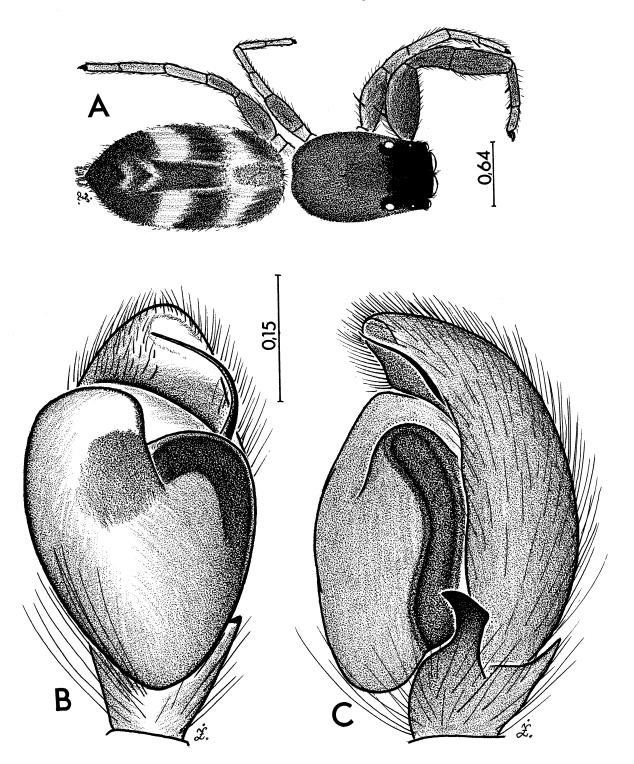


Fig.45. Holoplatys kalgoorlie, male (holotype).

pattern. Clypeus almost black with single light hairs. Chelicerae, pedipalps, maxillae and labium orange, sternum anteriorly orange, posterially dirty. Venter centrally beige, laterally darker. Legs I with dirty-orange lateral surface of femur. Patella, tibia, metatarsus and tarsus yellow. Other legs more delicate, slightly lighter.

Palpal organ as illustrated in Figure 46B,C.

Leg spination. mI: p0-1, r1-1.

Dimensions. CL 1.05, CW 0.66, CW/CL 0.62, EFL 0.36, EFL/CL 0.34, AEW 0.46, PEW 0.47, AL 1.18.

Female. The female is unknown.

Holoplatys lhotskyi n.sp. (incertae sedis)
Figs 47-48, Map 7

Material examined. Queensland: HOLOTYPE, male, Brisbane, Fig Tree Pocket, 29 Jan. 1973, V. Davies, QMB

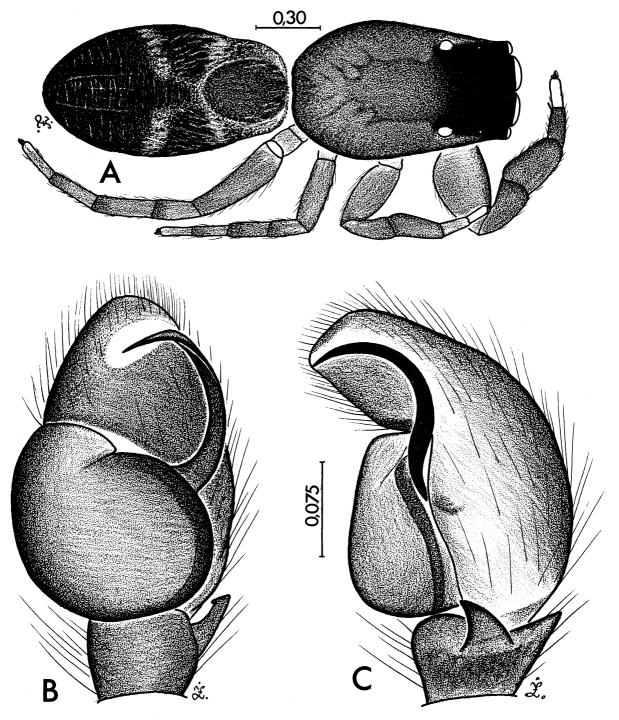


Fig.46. Holoplatys embolica, male (holotype).

S3568; Allotype, female, Rochedale S.F., beating, 31 Jan. 1980, V. Davies, R. Raven, QMB S3555; Paratypes, 2 females, same data, 21 Apr. 1980, QMB S3583; female, same data, 1 July 1980, QMB S3556. Tasmania: male, *Holoplatys* sp. Spider Den (North Lune), 5 Feb. 1988, A.

Clarke, AMS KS18882.

Etymology. The specific name is proposed in honour of John Lhotsky, Polish nineteenth-century

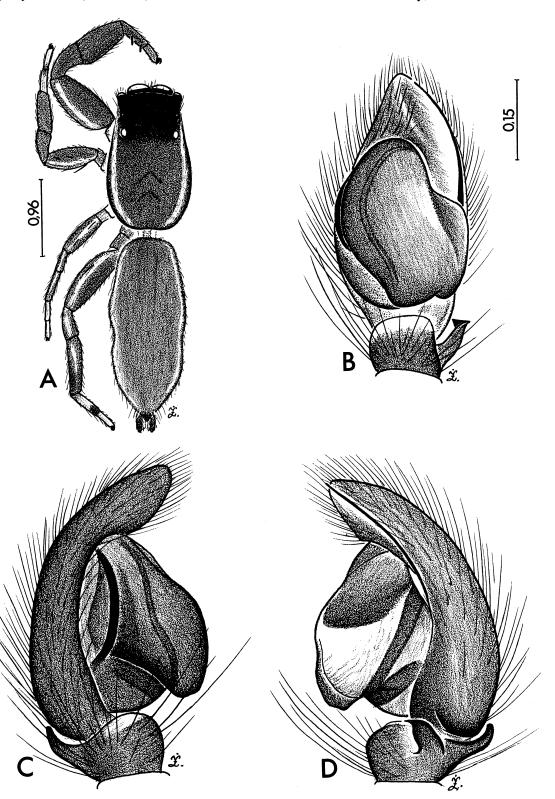


Fig.47. Holoplatys lhotskyi, male (holotype).

naturalist and explorer of the Australian Alps and Canberra area.

Diagnosis. Small, slender spider. Lateral stripes of white hairs along body. Palpal organ untypical for the genus: tegulum of irregular shape, embolus very long and thin, dorsal tibial apophysis large.

Male (Fig.47A). Eye field almost black, thorax dirty-brown with white lateral stripes. Abdomen yellow-orange with light band and dark lateral surfaces. Spinnerets dark-grey. Clypeus black with whitish hairs.

Chelicerae, maxillae, labium and sternum dirty-orangebrown, venter dirty-beige. Legs I dirty-brown, lighter distally, darker around joints. Dorsal parts of basal segments with white stripe. Other legs lighter.

Palpal organ as illustrated in Figure 47B-D. Leg spination. mI: p1-1, r1-1; mII: p0-1. Dimensions. CL 1.75, CW 1.12, CW/CL 0.64, EFL 0.61, EFL/CL 0.34, AEW 0.79, PEW 0.76, AL

Female (Fig.48A). Cephalothorax as in male. Abdomen beige, slightly darker centrally and

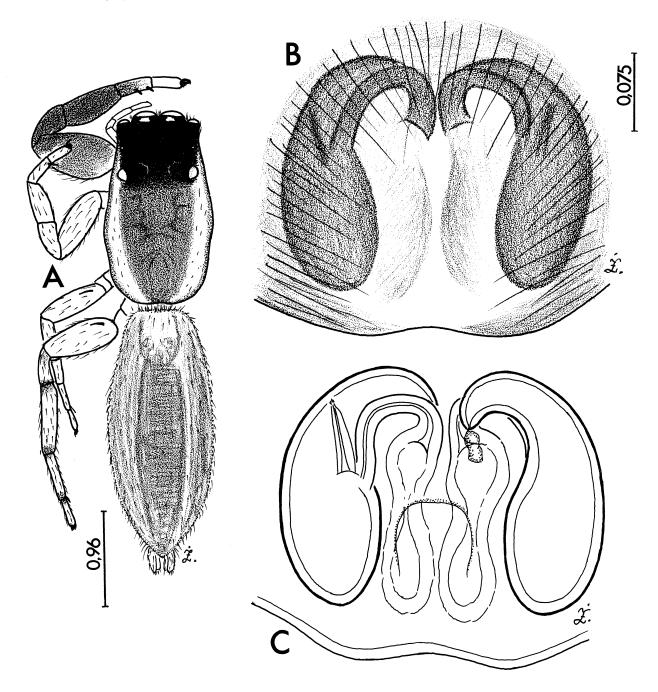


Fig.48. Holoplatys lhotskyi, female (allotype).

laterally, spinnerets beige. Clypeus brown with fringe of white hairs. Chelicerae, maxillae and labium dirty-brown. Pedipalps and sternum yellow, the last with brown margin; venter beige-grey. Distal femur, patella, tibia and proximal metatarsus of first legs dirty-brown, the rest and other legs yellow.

Genitalia (Fig.48B,C) similar to *planissima* group, with long spermathecae and insemination ducts.

Leg spination. mI: p1-1, r1-1; mII: p0-1.

Dimensions. CL 1.84-2.17 (2.03), CW 1.12-1.25 (1.21), CW/CL 0.56-0.62 (0.59), EFL 0.59-0.66 (0.62), EFL/CL 0.29-0.32 (0.30), AEW 0.86-0.96 (0.90), PEW 0.86-0.99 (0.93), AL 2.18-2.62 (2.45).

Tasmanian specimen identical in genitalic structure, but body colour almost black, which makes its status uncertain.

The panthera Group

The group consists of three species known from scattered localities in Papua New Guinea, Queensland and South Australia. Body small (2.44-4.52), cephalothorax almost parallel-sided. Male palpal organ with lateral and dorsal apophyses on tibia. Genitalia structure suggests close relationship with planissima group. Species included: panthera, minuta, queenslandica.

Holoplatys panthera n.sp.

Fig.49, Map 8

Material examined. South Australia: HOLOTYPE, female, Ooldea, A.M. Lea, SAMA N1988338.

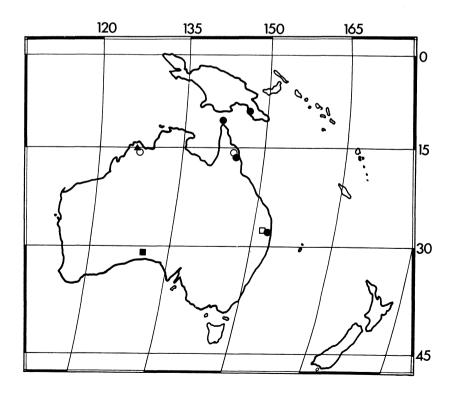
Etymology. The specific name refers to panther-like spots on abdomen.

Diagnosis. Cephalothorax textured, abdomen spotted, metatarsal spines on legs I and II much longer than in other species of the genus.

Male. The male is unknown.

Female (Fig.49C). Cephalothorax slender, slightly higher than usually, strippled (textured). Single white hairs scattered around eyes. Abdomen light, darker posteriorly with dark panther-like spots. Spinnerets grey-brown. Clypeus brown with single light hairs. Chelicerae light-brown, pedipalps whitishyellow. Maxillae and labium dirty-orange, sternum darker, venter with dark spots as on dorsal surface. Legs I with dark-brown patella, tibia and metatarsus, femur lighter, especially dorsoventrally, tarsus yellow. Other legs yellow, slightly darker around joints. Metatarsal spines on legs I and II long.

Genitalia (Fig.49A,B) similar to the *planissima* group. Leg spination. mI: p1-1, r1-1; mII: p1-1, r1-0.



Map 8. Closed triangle - Holoplatys bicolor Simon; open circle - H. bicoloroides n.sp.; open square - H. minuta n.sp.; closed square - H. panthera n.sp.; closed circle - H. queenslandica n.sp.

Dimensions. CL 1.70, CW 0.96, CW/CL 0.56, EFL 0.62. EFL/CL 0.36, AEW 0.85, PEW 0.85, AL 2.82.

Holoplatys minuta n.sp.

Fig.50, Map 8

Material examined. Queensland: HOLOTYPE, female, Brisbane, Lake Broadwater, brigalow, melon hole area, 26

Jan. 1985, V. Davies, J. Gallon, QMB S3598.

Diagnosis. Insemination ducts long and broad, narrowing distally, metatarsal spines on legs II absent.

Male. The male is unknown.

Female (Fig.50A). Eye field black, thorax dirty-dark-brown, darker marginally. Clusters of white hairs behind posterior eyes. Abdomen grey-brown, darkening

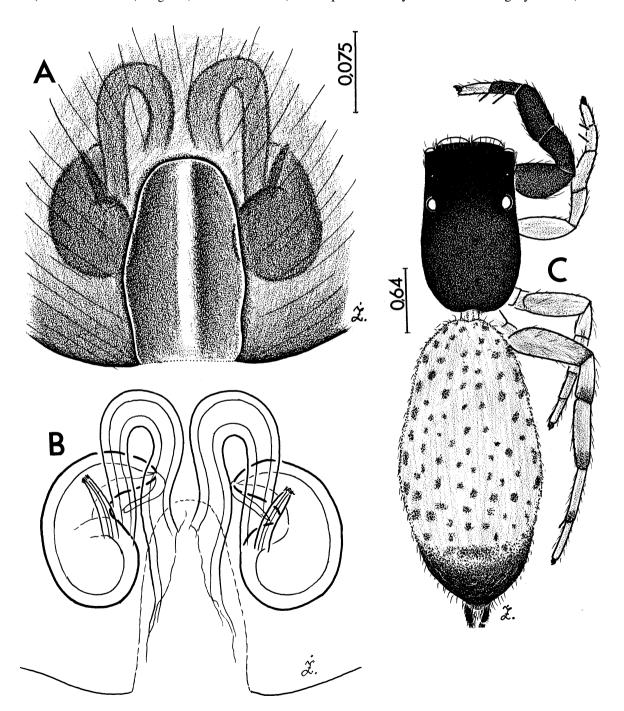


Fig.49. Holoplatys panthera, female (allotype).

posteriorly, with spots of white hairs. Clypeus blackish with single grey hairs. Chelicerae brown, pedipalps grey, lighter distally. Maxillae, labium and sternum dirty-orange-brown, the first with lighter tips. Venter light-grey centrally, laterally darker. Legs dirty-brown, lightening distally, tarsi yellow.

Epigyne (Fig.50B,C) with posterior depression, insemination ducts vast and long, narrowing distally, spermathecae long, accessory glands rather short.

Leg spination. mI: p1-1, r1-1.

Dimensions. CL 1.30, CW 0.81, CW/CL 0.62, EFL 0.45, EFL/CL 0.34, AEW 0.65, PEW 0.67, AL 2.11.

Holoplatys queenslandica n.sp.

Figs 51-52, Map 8

Material examined. Queensland: HOLOTYPE, male, Hammond Island, Torres Strait, grassland along beach, 27 Feb. 1975, E. Cameron QMB S3554: ALLOTYPE, female, Black Mountain, summer 1971-72, N.C. Coleman, QMB S3576; PARATYPE, female, Rochedale S.F., beating, 7 Dec. 1979, V. Davies, R. Raven, QMB S6761. Papua New Guinea: PARATYPES 2 females, National Capital District, Waigani, Botanic Garden, under *Eucalyptus* bark, 28 June-

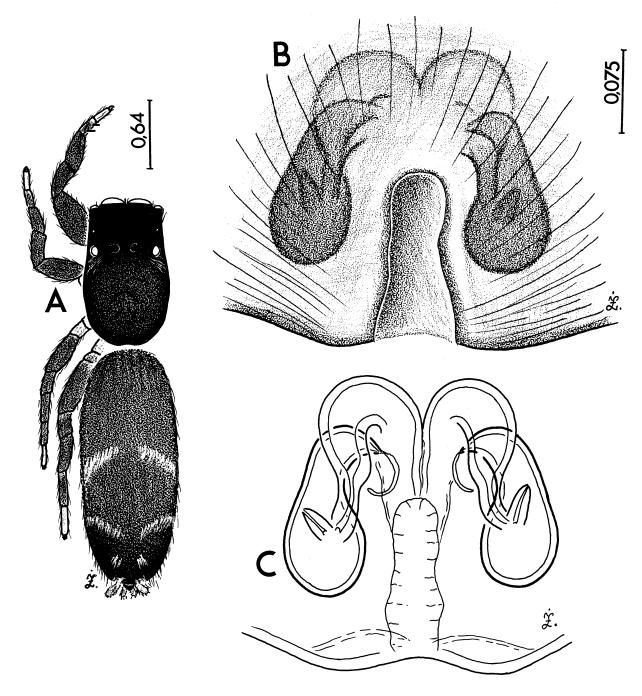


Fig.50. Holoplatys minuta, female (holotype).

1 July 1988, D. Court, M. Zabka, AMS KS19018.

Diagnosis. Thorax very elongate, dark. Female legs contrasting light. Distal spines only on metatarsus I. Dorsal tibial apophysis long, insemination

ducts "C"-shaped, shorter than in other species of the group.

Male (Fig.51A). Eye field black, thorax dirty-brown, darker marginally. Abdomen grey-brown with anterior

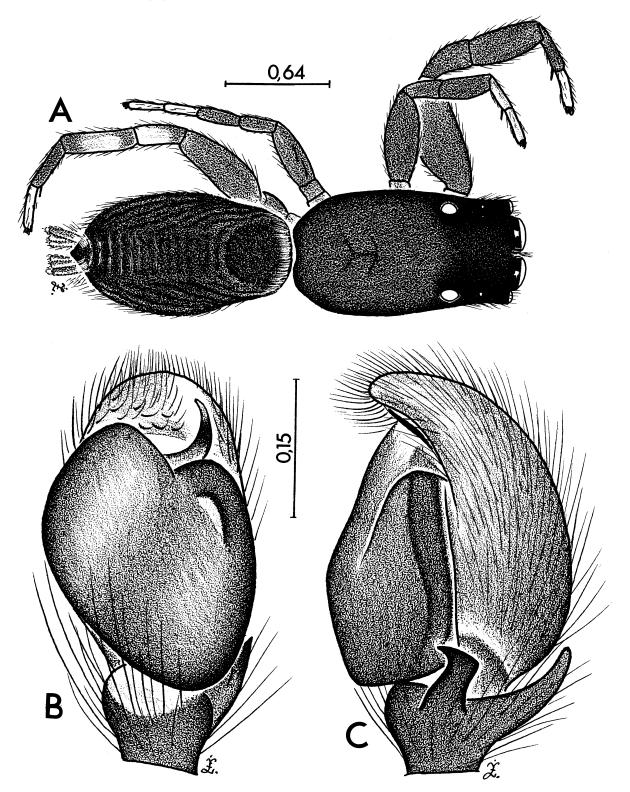


Fig.51. Holoplatys queenslandica, male (holotype).

brown scutum, lighter pattern of stripes and clusters of white hairs anteriorly and distally. Spinnerets dirty-orange. Clypeus black with single light hairs. Chelicerae, maxillae, labium and sternum dirty-orange-brown, the last with darker margin. Venter grey. Legs I and II dirty-brown, lighter dorsoventrally and distally, other legs slightly lighter.

Palpal organ (Fig.51B,C). Tegulum large, embolus short, thick, dorsal tibial apophysis long.

Leg spination. mI: p0-1, r0-1; mII: p0-1.

Dimensions. CL 1.43, CW 0.84, CW/CL 0.58, EFL 0.43, EFL/CL 0.30, AEW 0.65, PEW 0.66, AL 1.33.

Female (Fig.52A). Cephalothorax as in male. Abdomen dark-grey with clusters of light hairs anteriorly and distally. Spinnerets grey. Clypeus black with single grey hairs. Chelicerae, maxillae and labium grey, pedipalps yellow, sternum orange-brown with brown margin. Venter grey. Legs contrasting yellow-orange, sometimes femora slightly darker.

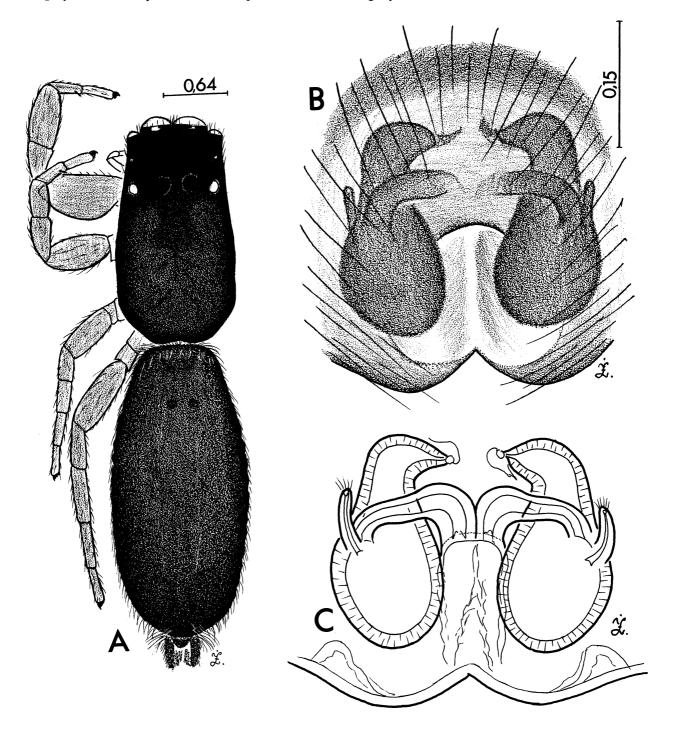


Fig.52. Holoplatys queenslandica, female (allotype).

Genitalia (Fig.52B,C). Insemination ducts 'C'-shaped, much shorter than in 2 previous species.

Leg spination. mI: p0-1, r0-1; MII: p0-1.

Dimensions. CL 1.68-2.21 (1.91), CW 0.99-1.25 (1.07), CW/CL 0.55-0.58 (0.56), EFL 0.53-0.60 (0.55), EFL/CL 0.27-0.31 (0.29), AEW 0.79-0.96 (0.85), PEW 0.79-0.99 (0.86), AL 2.04-2.97 (2.40).

The bicolor Group (incertae sedis)

The group consists of two species recorded from single localitites in Queensland and Western Australia. Medium spiders (4.92-6.20). Cephalothorax higher than in other groups, bicolourous. Palpal organ similar to that in panthera and grassalis groups, but no dorsal apophysis on tibia. Holoplatys bicolor Sim. with tibial spines on legs I. The untypical body structure of these two species makes their inclusion with any of the above species groups unlikely and their generic status uncertain. Species included: bicolor, bicoloroides.

Holoplatys bicolor Simon

Figs 53-54, Map 8

Holoplatys bicolor Simon, 1901b: 159.

Material examined. Queensland: type (?): female, Cooktown, MNHN 19924; male, Mount Molloy, grazed sclerophyll, 6 Nov. 1975, V.E. Davies, R. Raven, QMB S3593. Western Australia: male, Mitchell Plateau, Mining Camp, 9-19 May 1983, I. Naumann, J. Cardale, ANIC.

The only female from Cooktown longer than the dimensions given by Simon (5.08 and 4 respectively) therefore its type status is uncertain.

Diagnosis. Cephalothorax and abdomen bicoloured. Insemination ducts broad, copulatory openings oriented towards epigastric furrow. Tibial spines on legs I present.

Male (Fig.53A). Eye field dark with 2 black spots, thorax contrasting yellow. Abdomen lighter anteriorly, posteriorly black. In WA specimen (Fig.53B) whole abdomen almost black. Spinnerets dark-grey. Clypeus orange to dark. Chelicerae, pedipalps, maxillae and labium orange, sternum lighter, venter darker. Legs (Fig.53C,D) yellow to orange.

Palpal organ (Fig.53E,F) with small lateral apophysis on tibia. Tegulum elongate, with posterior lobe.

Leg spination. tI: p1-1 (2-2); mI: p1-1, r1-1; mII: p1-1.

Dimensions. CL 1.98, CW 1.15-1.19 (1.17), CW/CL 0.58-0.60 (0.59), EFL, 0.60, EFL/CL 0.33, AEW 0.79, PEW 0.85, AL 2.37-2.44 (2.40).

Female (Fig.54A). Body form and colour pattern similar to that in male. Clypeus, maxillae and labium orange, chelicerae, pedipalps and sternum lighter. Venter as dorsal aspect. Legs yellow to orange.

Genitalia as illustrated in Figure 54B,C.

Leg spination. tI: p1-1, r1-0; mII: p1-1, r1-1; mII: p1-1.

Dimensions. CL 2.31, CW 1.38, CW/CL 0.59, EFL 0.72, EFL/CL 0.31, AEW 0.92, PEW 0.97, AL 2.77.

Holoplatys bicoloroides n.sp.

Fig.55, Map 8

Material examined. Western Australia: HOLOTYPE, female, Walsh Point, Admiralty Gulf, 16 May 1983, J. Balderson, ANIC.

Diagnosis. No spines on tibia I, insemination ducts shorter than in *bicolor*, abdomen uniformly dark.

Male. The male is unknown.

Female (Fig.55A). Eye field black, thorax yellow, darkening marginally. Abdomen black. Chelicerae, maxillae and labium brown, sternum and legs yellow, venter almost black.

Genitalia (Fig.55B,C) similar to *bicolor* but insemination ducts shorter, copulatory openings oriented towards each other.

Leg spination. mI: p0-1, r0-1.

Dimensions. CL 2.57, CW 1.42, CW/CL 0.55, EFL 0.79, EFL/CL 0.30, AEW 1.12, PEW 1.12, AL 3.63.

The invenusta Group (incertae sedis)

The group consists of two relatively large species (6.30-10.23) known from scattered localities in Queensland, New South Wales, Victoria and Western Australia. Palpal organs with lateral and dorsolateral tibial apophyses, cymbium with flange. Copulatory openings close each other, insemination ducts short and vast, spermathecae very large. Femora of legs darker than other segments. Species included: *invenusta*, *borali*.

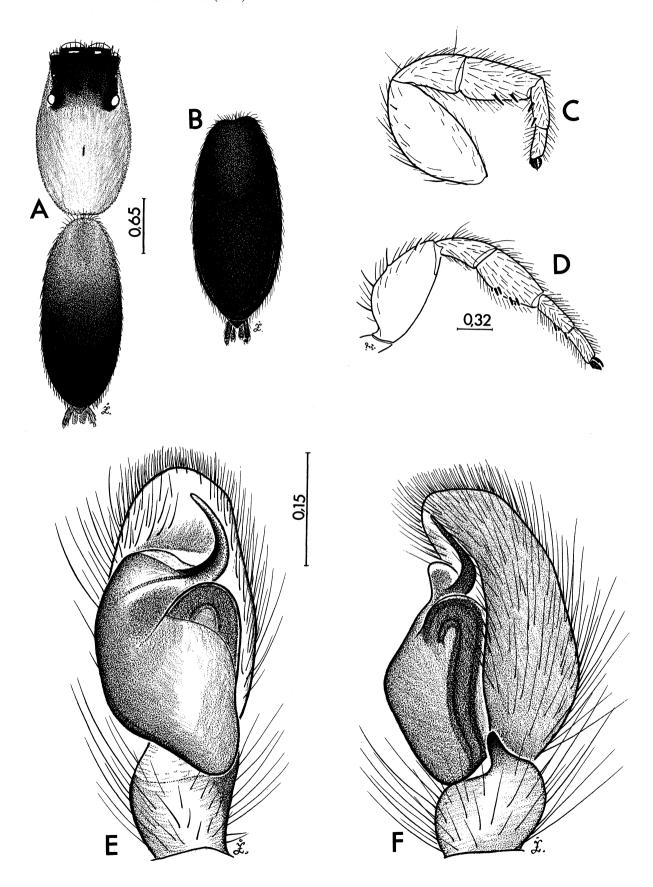


Fig.53. *Holoplatys bicolor*, male: dorsal body, abdomen, legs I and palpal organ (A,D-F specimen from Mount Molloy, B,C specimen from Mitchell Plateau).

Holoplatys invenusta (L. Koch) n.comb. Figs 56-57, Map 9

Marptusa invenusta L. Koch, 1879: 1099. Ocrisiona invenusta.—Simon, 1901a: 602.

Material examined. New South Wales: HOLOTYPE,

female, Sydney, (Mus. Godeffroy 16524), ZMH. Queensland: female, Preston, 1978, T. Adams, QMB S3588; female, Endfield Station, 30 m west Westmar, 9 Jan. 1979, R. Raven, V. Davies, QMB S4601. Victoria: male, female, Melbourne, Ashburton, 5 Jan. 1988, P.K. Lillywhite, WAMP 89/272-3.

Diagnosis. Cymbium of male palpal organ with

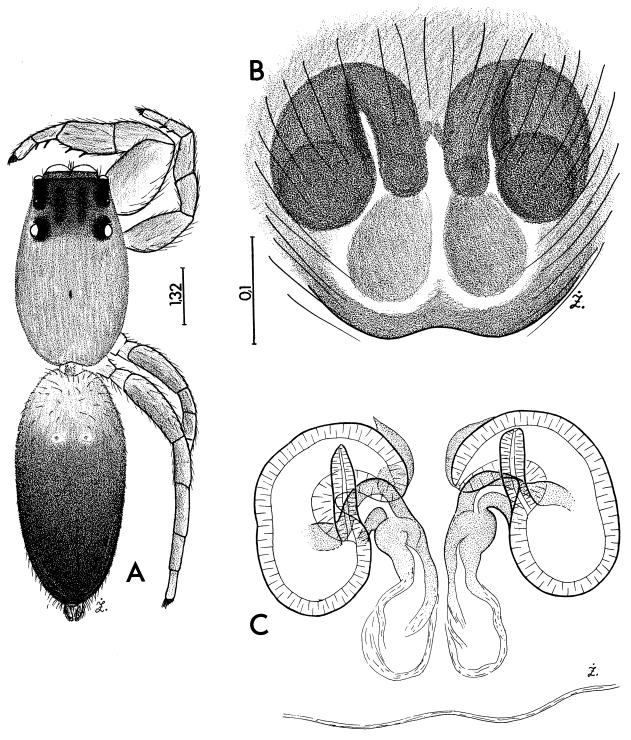


Fig.54. Holoplatys bicolor, female (type?).

flange (see arrow), tibial apophyses hook-like. Posterior margin of epigyne 'W'-shaped.

Male (Fig.56A). Eye field dark with 2 longitudinal black spots, thorax slightly lighter with black margin. Whole surface with white and dark hairs. Abdomen brownish-grey with light transverse spots and delicate, orange anterior scutum. Spinnerets grey-brown. Clypeus brown-black. Chelicerae, maxillae and labium brown with lighter tips, sternum brown, venter grey-brown.

Palpal organ as illustrated in Figure 56B,C.

Leg spination. mI: p1-1, r1-1; mII: p1-1.

Dimensions. CL 2.90, CW 1.80, CW/CL 0.62, EFL 1.00, EFL/CL 0.34, AEW 1.50, PEW 1.50, AL 3.40.

Female (Fig.57A). Cephalothorax brown to dark-brown, abdomen dark-grey with light mosaic of lines and small spots. Clypeus and chelicerae brown, maxillae and labium lighter with yellow tips, sternum orange, venter beige. Femora of legs brown, lighter dorsoventrally, other segments orange.

Epigyne (Fig.57B-D) with 'W'-shaped posterior margin. Insemination ducts short. Copulatory openings in the central part of epigyne, close each other. Spermathecae large.

Leg spination. mI: p1-0, r1-1; mII: p1-1.

Dimensions. CL 3.10-4.20 (3.83), CW 1.95-2.70 (2.45), CW/CL 0.62-0.63 (0.63), EFL 1.05-1.30 (1.19), EFL/CL 0.32-0.33 (0.33), AEW 1.75-2.10 (1.93), PEW 1.65-2.10 (1.88), AL 4.60-5.70 (5.23).

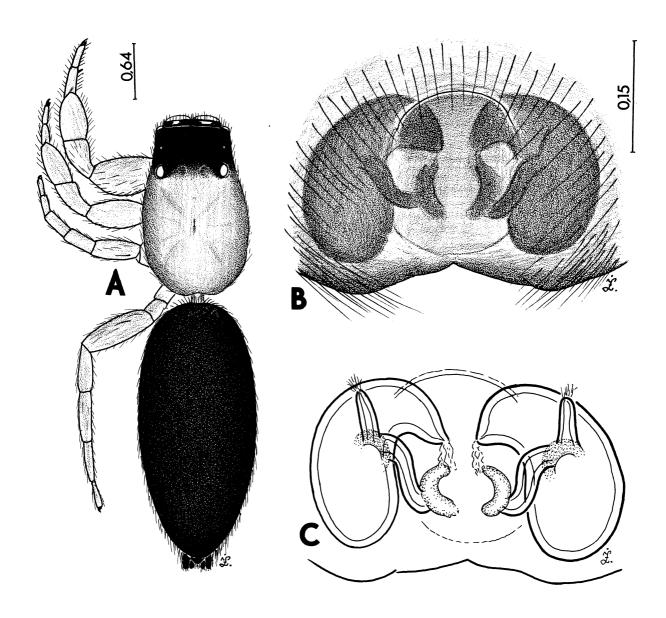


Fig.55. Holoplatys bicoloroides, female (holotype).

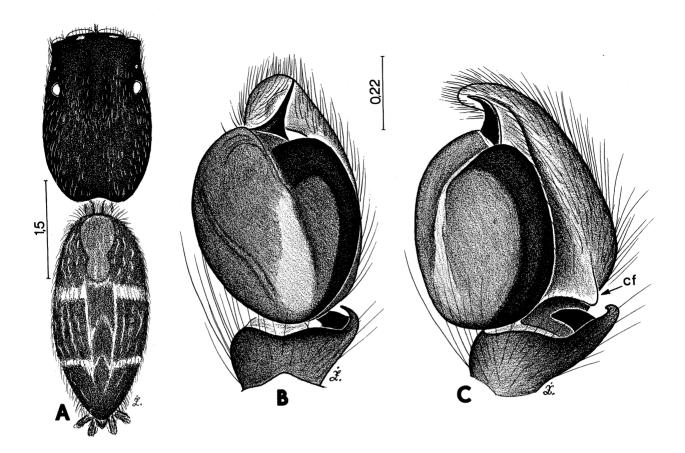
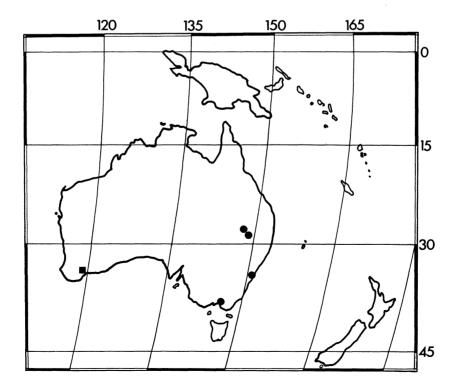


Fig.56. Holoplatys invenusta, male.



Map 9. Closed circle - Holoplatys invenusta (L. Koch); closed square - H. borali n.sp.

Holoplatys borali n.sp.

Fig.58, Map 9

Material examined. Western Australia: HOLOTYPE, female, Fitzgerald River Reserve, 7 Jan. 1971, L. Koch, W.K. Youngson, WAMP 88/37.

Diagnosis. Structure of genitalia similar to *invenusta* but posterior margin of epigyne with double pocket instead of 'W'-shaped.

Male. The male is unknown.

Female (Fig.58A). Eye field black, thorax dark-brown, with brown and whitish hairs marginally. Abdomen partly macerated, dark-grey with lighter spots. Spinnerets dark-grey. Clypeus black with brown hairs. Chelicerae brown, maxillae lighter with yellow tips, labium and sternum light-brown with darker margin. Venter grey, darker laterally. Femora of legs and pedipalps brown, other segments yellow. Leg I generally darker than others.

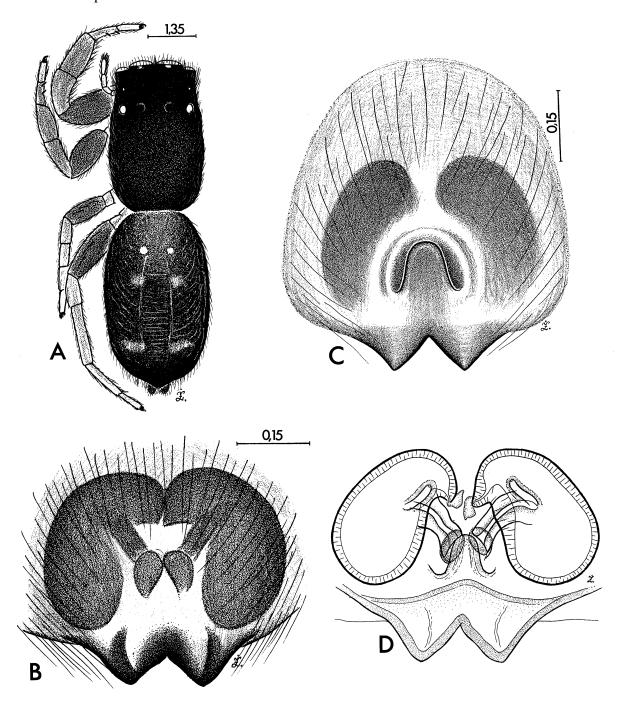


Fig.57. Holoplatys invenusta, female (A,B - specimen from Preston, C,D - holotype).

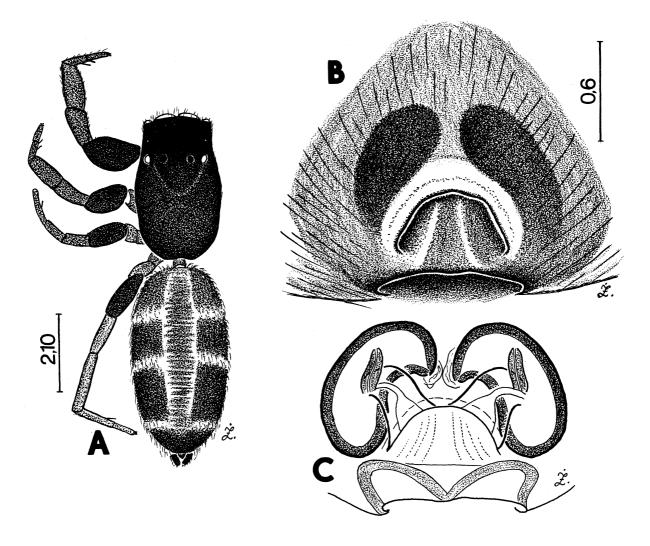


Fig.58. Holoplatys borali, female (holotype).

Genitalia as in Figure 58B,C.

Leg spination. mI: p1-1, r1-1; mII: p1-1.

Dimensions. CL 4.29, CW 2.71, CW/CL 0.63, EFL 1.25, EFL/CL 0.29, AEW 2.04, PEW 1.98, AL 5.94.

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