

## A supplement to the revision of the Australian spider genus *Storena* (Araneae: Zodariidae)

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**Abstract** – The continental specimens formerly identified as *Storena colossea* Rainbow prove to belong to a species that is here described for the first time as *S. mainae*, together with the male of another new species (*S. harveyi*) and the unknown female of *S. aspinosa* Jocqué and Baehr. New records of other *Storena* species are provided.

### INTRODUCTION

*Storena colossea* Rainbow was described on the base of two females from Lord Howe Island off the coast of southeastern Australia. Females with virtually identical external epigynes and matching males were subsequently found on the continent and were attributed to the same species. However, already Jocqué (1991), but mainly Jocqué and Baehr (1992) in the revision of the genus *Storena*, suspected that the continental specimens of *S. colossea* Rainbow, could possibly belong to another, undescribed species. The description of a new species had to be postponed until males from Lord Howe Island were available, in the first place because the taxonomy of the genus is based on male palpal morphology (Baehr and Jocqué 1994). It now appears that insular males are not conspecific with the continental ones. As we had refrained from dissecting the cotypes of *S. colossea*, so far only the external structure of the epigynes of the insular species was studied and drawn. A closer look at the strongly sclerotised internal structure of the epigyne now also revealed a reliable character for the separation of the species using females.

Since the revision of *Storena* (Jocqué and Baehr 1992) another undescribed species and a number of new records and other data are available. These new distribution data corroborate the general pattern as presented in the study of Baehr and Jocqué (1994) only the new record of *S. recta* is far away from the distribution as known before but as could be expected in the far northern part of the continent. It would indicate though that in all groups, including the *formosa*-group, the most plesiomorphic taxa have a large northern distribution.

### MATERIALS AND METHODS

The format of the description follows Jocqué and Baehr (1992). All measurements are in mm.

Institutes from which material was borrowed are abbreviated as follows:

- AMS: Australian Museum, Sydney (M. Gray)
- BMNH: The Natural History Museum (P. Hillyard)
- CAS: California Academy of Sciences, San Francisco (W. Pulawski, D. Ubick and C. Griswold)
- KBIN: Koninklijk Belgisch Instituut voor Natuurwetenschappen (L. Baert)
- MNHN: Muséum National d'Histoire naturelle, Paris (J. Heurtault and C. Rollard)
- NMV: Victoria Museum, Melbourne (M. Harvey and C. McPhee)
- QM: Queensland Museum, Brisbane (R. Raven)
- SAMA: South Australian Museum, Adelaide (D. Hirst)
- WAM: Western Australian Museum, Perth (M. Harvey)
- ZSM: Zoologische Sammlung des Bayerischen Staates, München (M. Baehr)

### *Storena colossea* Rainbow

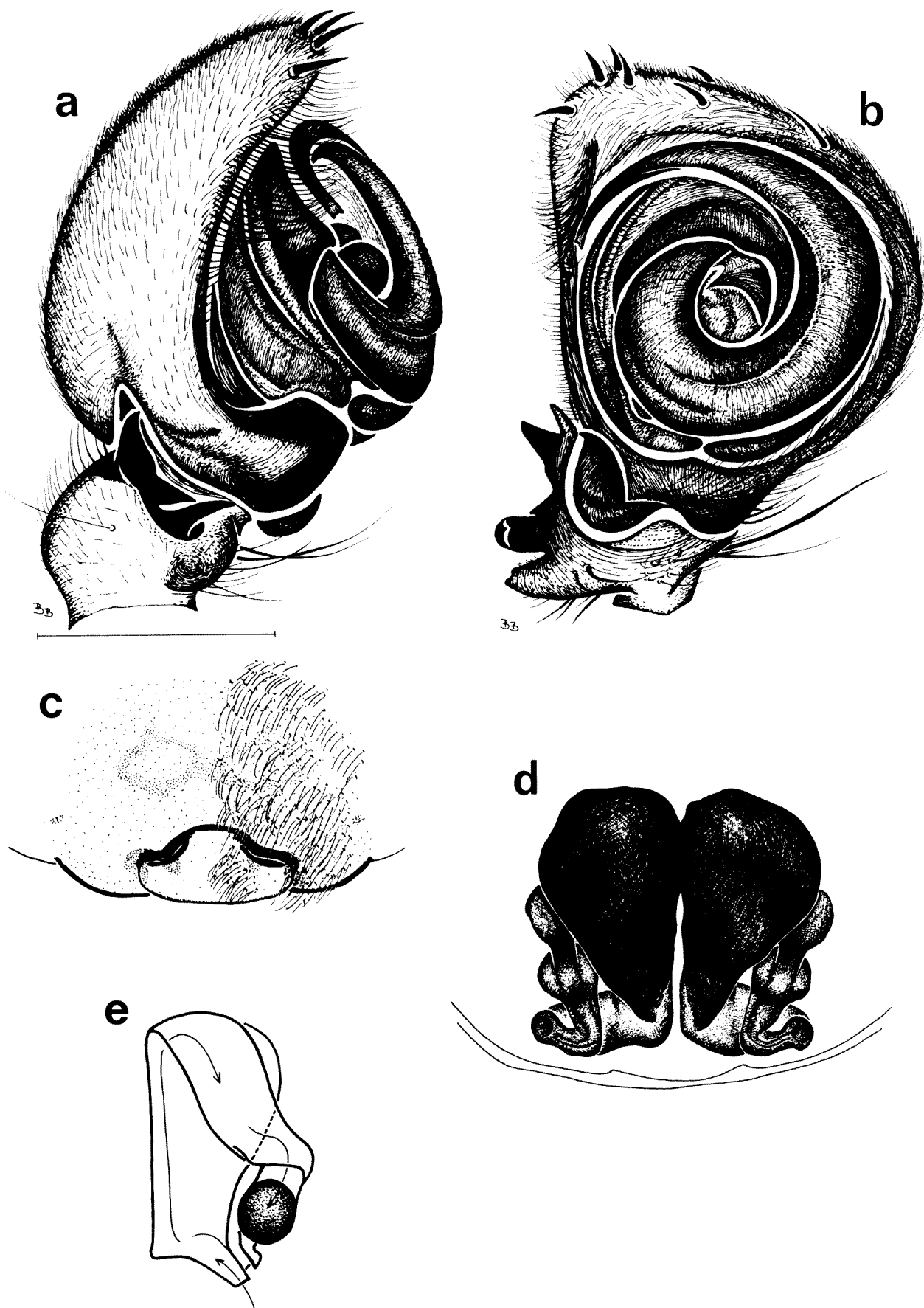
Figures 1a–e

*Storena colossea* Rainbow, 1920: 237, pl. 28, figs 23–25 (descr. ♀); Jocqué, 1991: 87 part, figs 181–184, 187; Jocqué and Baehr, 1992: 989 part, fig. 20 c.

### Material Examined

*Holotype*

In SAMA (not examined).



**Figure 1** *Storena colossea* Rainbow: a, male palp, lateral view; b, male palp, ventral view; c, epigyne, ventral view; hairs omitted on one side; d, epigyne, dorsal view, cleared; e, schematic drawing of course of ducts in left part of epigyne, ventral view. Scale lines = 1 mm.

Paratype

**Australia: Lord Howe Island:** 1 ♀ “cotype” (AMS KS6627).

Other Material

**Australia: Lord Howe Island:** 1 ♀, November 19?? (AMS KS15673); 1 ♀, station 35, 130 m, under bark (AMS KS15639); 2 ♀, without further data (AMS KS15676 and KS17058); 1 ♂, 1 ♀ with egg case, station 30 (b), February 1971, M. Gray (AMS KS15552).

Diagnosis

The male is easily recognized by the presence of four tibial apophyses which it shares with *S. mainae*; it differs from that species by the smooth carapace and its much less contrasted colour pattern; the female is equally smooth and has a typical epigyne with broad median plate, the broad entrance ducts running forward, immediately run back towards the small spermathecae whereas in *S. mainae* there are two additional curves.

Description

**Male** (AMS KS15552)

Total length: 12.40; carapace 6.40 long, 4.00 wide. Tibia I: 4.00.

Colour: carapace uniform dark reddish brown, with thin darker margin; chelicerae dark chestnut brown; sternum medium brown with darker lateral margins; legs: P and T orange; F, Mt and T darker. Abdomen grey with 5 pale spots, pale brown pitted shield in middle and faint dorsal scutum running from front onto the shield.

Carapace smooth and shiny.

Eyes: a: 0.40; b: 0.26; c: 0.30; d: 0.32; e: 0.08; f: 0.14; g: 0.18; h: 0.32; i: 0.78. MOQ: AW = 1.18 PW; AW = 1.12 L. Clypeus 0.76 mm high or 2.9 times width of ALE.

Legs: measurements and spination (tables 1 and 2). Hinged hairs: TI d1 TII d2.

Male palp (Figs 1 a, b): Tibia with four lateral apophyses, all pointed as seen from the ventral side and of comparable length, the third one from above slightly longer; superior three strongly sclerotised, inferior one not so; superior one straight, second one slightly curved, third one strongly curved inwards, fourth one straight, rounded at extremity as seen from the side.

Table 1 *Storena colosseae* ♂, leg measurements.

	F	P	T	Mt	t	Tot
I	4.5	1.6	4.0	4.3	2.3	16.7
II	4.0	1.6	3.1	3.6	2.2	14.5
III	3.2	1.6	2.4	3.6	1.7	12.5
IV	4.1	1.7	3.5	4.8	2.1	16.2

Table 2 *Storena colosseae* ♂, leg spination.

	F	P	T	Mt
I	pl1d2*	–	pl1 v2–2–2	v6 dw3
II	pl1 d3*	–	pl2 v1–2–2	v4 dw3
III	pl2d2*rl1	pl3d1rl2	pl2d2rl2v2–2–2	10disp dw6
IV	d3*rl1	pl2d2rl1	pl3d2rl3v2–2–2	12disp dw6

Cymbium excavated in front; lateral side very slightly concave, provided with shallow ventral groove; with dorsal hinged hair; basolateral flange large, more or less circular, spoon-shaped in mesal view. Embolus looped 1.3 times but possibly longer and broken off in both palps; massive from base to end; DTA rather large, folded over base of embolus. VTA represented by low ridge on centre of tegulum. Tegular ridge on proximal end of tegulum ending in large, exposed knob.

**Female** (AMS KS15552)

Total length: 12.50; carapace 6.70 long, 4.00 wide. Tibia I: 4.10.

Colour: as in male except for absence of abdominal scutum. Carapace smooth and shiny.

Eyes: a: 0.34; b: 0.24; c: 0.30; d: 0.32; e: 0.10; f: 0.20; g: 0.14; h: 0.32; i: 0.84. MOQ: AW = 1.08 PW; AW = 0.95 L. Clypeus 0.80 mm high or 3.3 times width of ALE.

Legs: measurements and spination (tables 3 and 4). Hinged hairs: TI d1 TII d2.

Epigyne (Figs 1 c–e): with central plate covering posterior third of epigyne; anterior margin of plate broadly bordered with black. Vulva: internal structures strongly sclerotised: in dorsal view one sees a large forward-running part of the copulatory duct and to the side a narrow backward-running part which ends in a small spermatheca hidden by the large part; underneath these, invisible in dorsal view, there is another bight of the copulatory duct, this one with a backward-running, wide part and a narrower, forward-running part.

Distribution

Lord Howe Island.

Remarks

Observations on specimens of AMS KS15552: female in webbed hole in bark; male in crevice in bark; egg case semispherical, c. 1.0 cm in diameter,

Table 3 *Storena colosseae* ♀, leg measurements.

	F	P	T	Mt	t	Tot
I	4.1	1.7	3.5	4.0	2.3	15.6
II	3.8	1.6	3.0	3.4	1.9	13.7
III	3.2	1.5	2.5	3.3	1.8	12.3
IV	4.0	1.9	3.4	4.4	1.9	15.6

Table 4 *Storena colossea* ♀, leg spination.

	F	P	T	Mt
I	pl1d2*	–	pl1 v2–2–2	v4 dw3
II	pl1d3*	–	pl1 v1–2–2	v6 dw3
III	pl1d3*r1l	pl3d2rl1	pl4d3rl2v2–2–2	12disp dw6
IV	d3*r1l	pl3d2rl1	pl4d3rl3v2–2–2	14disp dw6

containing 31 pale yellow eggs of ± 2.5 mm diameter.

*Storena mainae* sp. nov.  
Figures 2a–e

*Storena colossea* Rainbow: Jocqué, 1991: 87 (in part) (descr. ♂), figs 185–189; Jocqué and Baehr, 1992: 989 (in part) (descr. ♂), figs 20a–c.

Material Examined

*Holotype*  
♂, Mt Dandenong, Victoria, Australia, 5 July 1977, M.R. Nurse (NMV).

*Paratypes*  
**Australia: New South Wales:** 1♂, Jenolan South Forest, 25 April 1968, D. A. D. (AMS KS15605 deposited in KBIN); 1♀, Boggabilla, 10 March 1970, J. Cann (AMS KS15632 deposited in KBIN); 1♀, Sackville, J. Saunders (AMS KS3391); 1♀, Bilpin, Kurragong, 7 January 1930, E.M. Hurst (AMS KS15714); 2♂, between Lithgow and Mudgee, along running stream, 16 March 1986, P. Docker (AMS KS16532); 2♂, Bilpin (AMS KS11403, 1♂ deposited in ZSM, KS10768); 1♀, Tom Ugly’s Point, 28 January 1952, D.O. Connnor (AMS KS15607 deposited in ZSM); 1♂, Narrabeen (AMS KS15602); 2♂, Sydney (AMS KS15598); 1♂, Lugarno, April 1975, Packer (AMS KS15698); 3♂, Bombala, May 1937, A.J. Barrett (AMS KS15706 and KS15599); 1♀, Nowra, 25 May 1971 (AMS KS15606); 1♂, Wolumla, nr. Bega, 2 April 1986, K. Savage (AMS KS16550); 1♀ with egg sac: Jenolan, December 1979, under log (AMS KS9973); 1♀, Jenolan Caves, 23 October 1901, V. Wiburd (AMS KS15604); 1♀, Jenolan, 6 March 1902, V. Wiburd (AMS KS15608); 1♀, no data (MNHN 15451); 1♀ with egg cocoon: nr. Mt. Wilson, 900m, 22 December 1962, Ross and Cavagnaro (CAS); 1♂, Nowta, May 1930, F.

Table 5 *Storena mainae* Ht ♂, leg measurements.

	F	P	T	Mt	t	Tot
I	4.2	1.6	4.0	4.2	2.9	16.90
II	3.9	1.3	3.1	3.6	2.3	14.20
III	3.3	1.5	2.4	4.7	1.7	13.60
IV	4.3	1.6	3.5	3.4	2.0	14.80

Rodway (BMNH 1930.7.14.3). **Victoria:** 1♂, Donvale, 23 April 1969, R. Warnecke (NMV); 1♂, East Gippsland, Wrong Creek Trail, Rodger R forest block, January 1983, pitfall, D. Allen (AMS KS12616); 1♂, Healesville, Coranderk Reserve, 20 March 1982, under log, M. Harvey (NMV); 1♀, Wattle Glen Vir., 20 July 1925, C. Barrett (NMV).

Diagnosis

The male is easily recognized by the presence of four tibial apophyses which it shares with *S. colossea*; it differs from that species by the granulated carapace with a contrasting pattern. The female is equally granulated. The epigyne with broad median plate, has an internal structure in which the entrance ducts have two extra turns as compared with *S. colossea*.

Description

*Male*  
Total length 11.20; carapace 6.40 long, 4.00 wide; tibia I: 4.00.

Colour: carapace bright red with dark brown cephalic area; pubescence very short and thin. Chelicerae dark brown with pale spot near extremity; sternum orange, with dark brown lateral margins. Legs orange with Mt and t dark brown to black, F not darkened. Abdomen dark sepia gray with pale brown pitted shield and two pairs of pale patches on each side; two anastomosing triangles in front of spinnerets. Carapace with cephalic area granulated.

Eyes: a: 0.32; b: 0.24; c: 0.24; d: 0.30; e: 0.08; f: 0.18; g: 0.16; h: 0.38; i: 0.66. MOQ: AW = 1.12 PW; AW = 1.09 L. Clypeus 0.82 mm high or 3.5 times width of ALE.

Legs: measurements and spination (tables 5 and 6). Hinged hairs: TI d1 TII d1.

Male palp (Figs 2 a–b): Tibia with four lateral apophyses: two short, sharp, dorsolateral ones, a long lateral one pointing down and forward, and a short, sharp, haired, ventrolateral one pointing downward. Cymbium broad and excavated in front; lateral side very slightly concave, provided with ventral groove; with hinged hair; basolateral flange large, more or less circular, spoon-shaped in mesal view. Embolus looped 1.5 times; massive from base to end of first loop from whereon whip-like; DTA rather large, folded over base of

Table 6 *Storena mainae* Ht ♂, leg spination.

	F	P	T	Mt
I	pl1d2*	–	pl1 v2–2–2	v5 dw4
II	pl1d3*	pl1	pl2 v2–2–2	v6 dw4
III	pl1d3*r1l	pl10d2rl1	pl4d3rl2v2–2–2	10disp dw6
IV	d3*r1l	pl10d3rl1	pl5d3rl23v2–2–2	10disp dw6

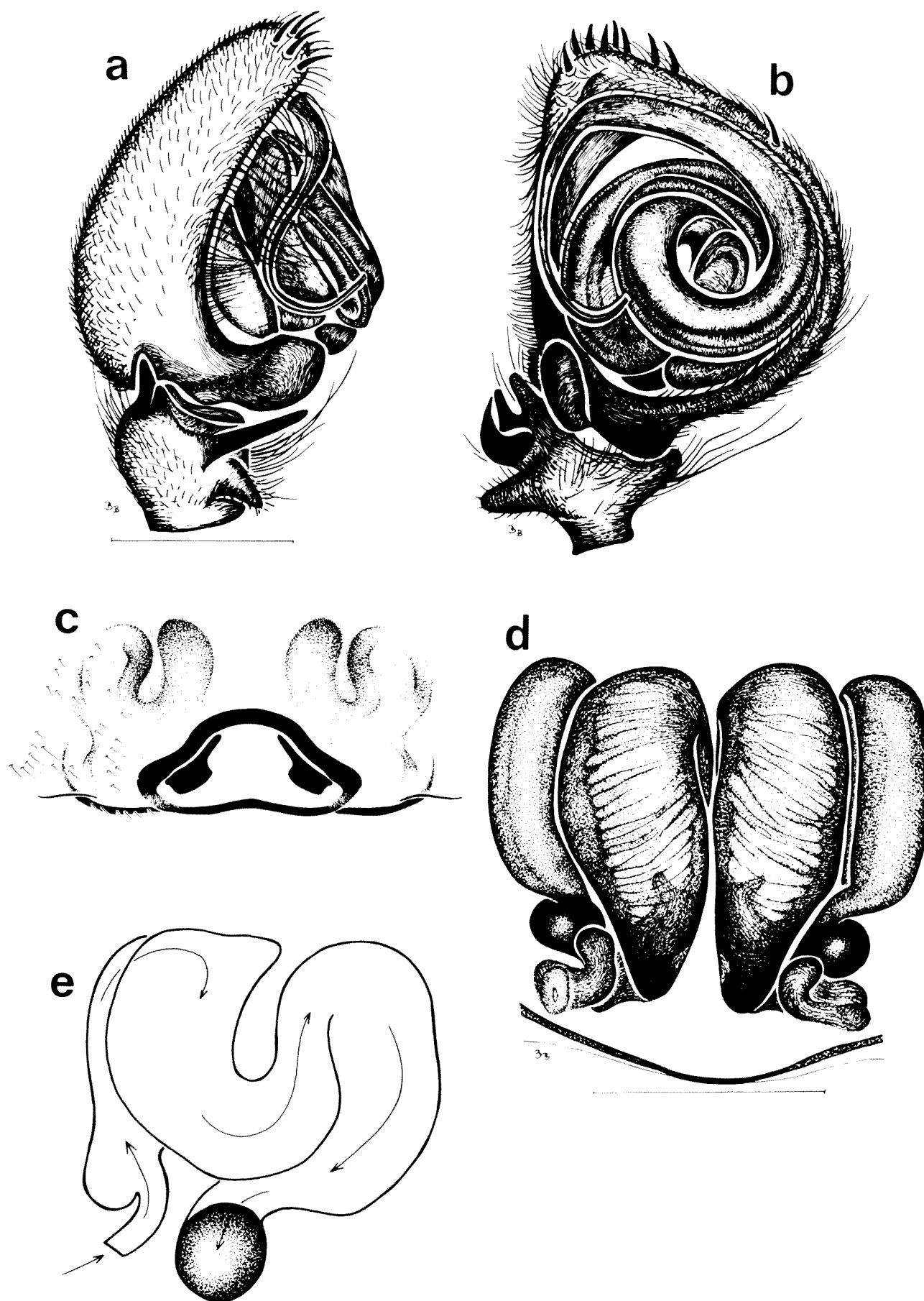


Figure 2 *Storena mainae* sp. nov.: a, male palp, lateral view; b, male palp, ventral view; c, epigyne, ventral view, hairs omitted on one side; d, epigyne, dorsal view, cleared; e, schematic drawing of course of ducts in left part of epigyne, ventral view. Scale lines = 1 mm.

Table 7 *Storena mainae* Pt ♀, leg measurements.

	F	P	T	Mt	t	Tot
I	4.5	1.7	3.9	4.0	2.6	16.70
II	4.0	1.6	3.0	3.4	2.1	14.10
III	3.2	1.7	2.2	3.3	1.7	12.10
IV	4.2	2.0	3.2	4.1	1.9	15.40

Table 8 *Storena mainae* Pt ♀, leg spination.

	F	P	T	Mt
I	pl1d2*	–	pl1 v2–2–2	v5 dw4
II	pl1d3*	pl1	pl2 v2–2–2	v6 dw4
III	pl1d3*rl1	pl8d3rl1	pl4d3rl2v2–2–2	8disp dw6
IV	d3*rl1	pl7d3rl1	pl3d3rl23v2–2–2	10disp dw6

embolus. VTA represented by low ridge on centre of tegulum. Tegular ridge on proximal end of tegulum ending in large, exposed knob.

Female

Total length 15.5 (12.9 – 17.5); carapace 7.0 (6.4 – 7.9) long, and 4.2 (3.7 – 4.6) wide; tibia I: 3.9.

Colour: as in male. Carapace with cephalic area granulated.

Eyes: a: 0.26; b: 0.22; c: 0.20; d: 0.28; e: 0.10; f: 0.16; g: 0.12; h: 0.32; i: 0.70. MOQ: AW = 1.19 PW; AW = 0.94 L. Clypeus 0.84 mm high or 3.8 times width of ALE.

Legs: measurements and spination (tables 7 and 8). Hinged hairs: TI d1 TII d1.

Epigyne (Figs 2 c–e): with central plate covering posterior third of epigyne; anterior margin of plate broadly bordered with black. Vulva: internal structures strongly sclerotised: there is a broad dorsal entrance duct running forwards, at the turning point (180°) it becomes much narrower and thence runs backwards to about 3/4 of the length of the dorsal part, turns over 180° again to run forwards where it turns for the last time over 180° from where it runs back towards the small spermatheca, the duct becoming narrower at each turn.

Distribution

New South Wales and Victoria.

Etymology

This common species of *Storena* is named after Barbara York Main in esteem for her important work on Australian spiders.

Key

*Storena mainae* will key out to *S. colossea* using the key provided by Jocqué and Baehr (1992). Couplets 16 and 17 of the key to the males should therefore

be changed and the following couplets renumbered as indicated:

15. Cymbium not strongly narrowed but rounded distally; flange spoon-shaped or swollen; embolus coiled once or 1.5 times ..... 16

Cymbium with clearly narrowed part distally; flange hook-shaped; embolus coiled twice, very thin in distal part ..... 19

16. Palpal tibia with 4 apophyses ..... 17

Palpal tibia with only three apophyses; embolus coiled once, massive from base to tip ..... 18

17. Third apophysis from above, hardly longer than remainder (Figs 1 a, b); carapace smooth; colour pattern not contrasted ..... S. colossea

..... S. colossea

Third apophysis from above, almost twice as long as remainder (Figs 2 a, b); carapace granulate; carapace with red thoracic and dark cephalic part ..... S. mainae

18. Embolus with short straight stretch just before final bend; ventrolateral haired boss of palpal tibia poorly developed and blunt ..... S. cochleare

..... S. cochleare

Embolus smoothly curved to tip; ventrolateral haired boss on palpal tibia well developed, with sharp tip ..... S. cyanea

19. Carapace uniform dark reddish brown with metallic blue tinge; DTA appearing as a simple lip overhanging the embolus ..... S. metallica

..... S. metallica

Carapace dark reddish brown with paler thoracic area, no metallic tinge; DTA overhanging embolus with sharp tip pointing back ..... S. scita

*Storena aspinosa* Jocqué and Baehr

Figures 3a, b

*Storena aspinosa* Jocqué and Baehr, 1992: 971 (descr. ♂), figs 11 a, b.

New Material Examined

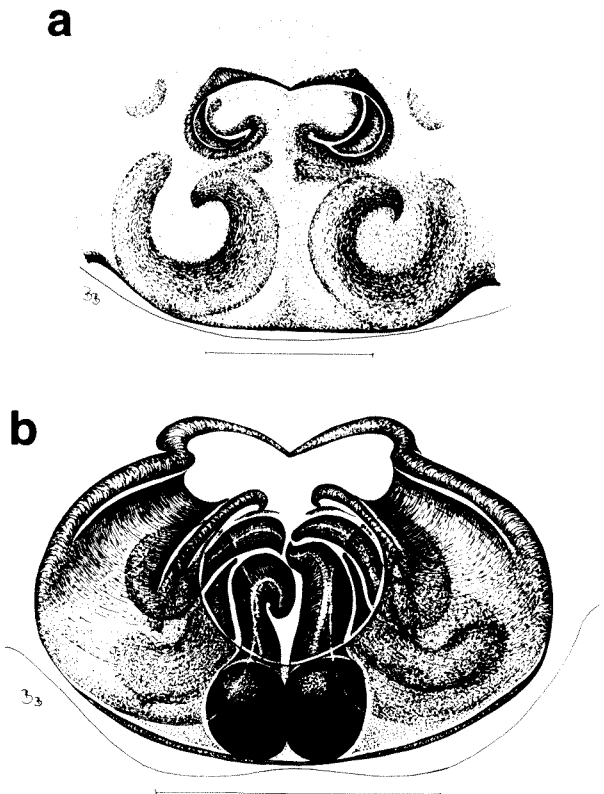
Australia: South Australia: 1 ♀, 16 km north of Coell on Lincoln Highway, Eyre Peninsula, 33°33'S, 137°01'E, FN 16, 14 December 1952, B. York Main (WAM 94/513).

Description

Female

Total length 11.9; carapace 5.8 long, 3.4 wide; tibia 13.5.

Colour: carapace reddish brown, paler in thorac-



**Figure 3** *Storena aspinosa* Jocqué and Baehr: a, epigyne, ventral view; b, epigyne, dorsal view, cleared. Scale lines = 1 mm.

ic area; pubescence thin and pale; chelicerae reddish brown; sternum yellow orange with long golden pubescence; legs yellow orange, darkened towards extremity. Abdomen grey with 5 pale dorsal spots: sides and venter grey.

Carapace finely granulated and rebordered; sternum without swelling, not rebordered.

Eyes: a: 0.26; b: 0.24; c: 0.20; d: 0.20; e: 0.1; f: 0.06; g: 0.14; h: 0.24; i: 0.5. MOQ: AW = 1.16 PW; AW = 1.14 L. Clypeus 0.84mm high or 3.5 times with of ALE.

Legs: measurements and spination (tables 9 and 10)

Epigyne (Fig. 3a): densely haired, with a large central depression in the shape of a heart, but posterior tip open. Vulva (Fig. 3b): copulatory ducts with several dense loops, continuing into looped ducts entering strongly sclerotised, touching spermathecae.

**Table 9** *Storena aspinosa* ♀, leg measurements.

	F	P	T	Mt	t	Tot
I	4.0	1.1	3.9	3.9	2.9	15.8
II	3.3	1.1	3.2	3.2	2.2	13.0
III	3.0	1.1	2.2	3.2	1.6	11.1
IV	3.5	1.1	3.0	4.1	2.0	13.7

**Table 10** *Storena aspinosa* ♀, leg spination.

	F	P	T	Mt
I	pl1d2	–	pl2v2–2–2–1–2	v8dw4
II	pl1d3	pl1	pl5v2–2–2–1–2	v7dw4
III	pl2d3rl2	pl5d2rl1	pl4d3rl3v2–2–2	18dispdw6
IV	d3rl1	pl6d2rl1	pl4d2rl5v2–2–1–2–2	17dispdw6

**Distribution**  
South Australia.

**Remarks**  
The female is closely related to *S. fungina* Jocqué and Baehr, recognised by the epigyne with a heart-shaped central depression and densely wound copulatory ducts. In contrast to *S. fungina* the vulva lacks the atrium-like swelling of the copulatory ducts and the spermathecae are not separated.

*Storena harveyi* sp. nov.  
Figures 4a, b

**Material Examined**

*Holotype*  
♂, Tom Price, Western Australia, Australia, 22°41'S, 117°48'E, 28 January 1994, c/o Department of CALM (WAM 94/69).

**Diagnosis**  
This species is closely related to *S. deserticola* Jocqué and *S. ignava* Jocqué and Baehr from which it differs in the coarse granulation of carapace, sternum and coxae, in the shape of ventrolateral tibial apophysis, in the shape of the embolus tip which is prolonged, acute and not curved and in the triangular sclerotised tip of VTA. Just like *S. deserticola*, but in contrast with *S. ignava*, it has only three pale spots on the abdomen.

**Description**

*Male*  
Total length 11.2; carapace 6.2 long, 3.5 wide; tibia 3.1.

Colour: chelicerae and carapace dark reddish chestnut brown, pubescence very thin, short and greyish; sternum and legs also reddish chestnut brown; abdomen dark sepia with a pair of white spots behind the pitted shield; a third pale rectangular spot in front of the spinnerets; sides and venter dark sepia with some small pale spots.

Carapace, sternum and coxae coarsely granulated. Carapace rebordered. Sternum not rebordered.

Eyes: a: 0.36; b: 0.32; c: 0.26; d: 0.26; e: 0.06; f: 0.06; g: 0.14; i: 0.50. MOQ: AW = 1.10 PW; AW =

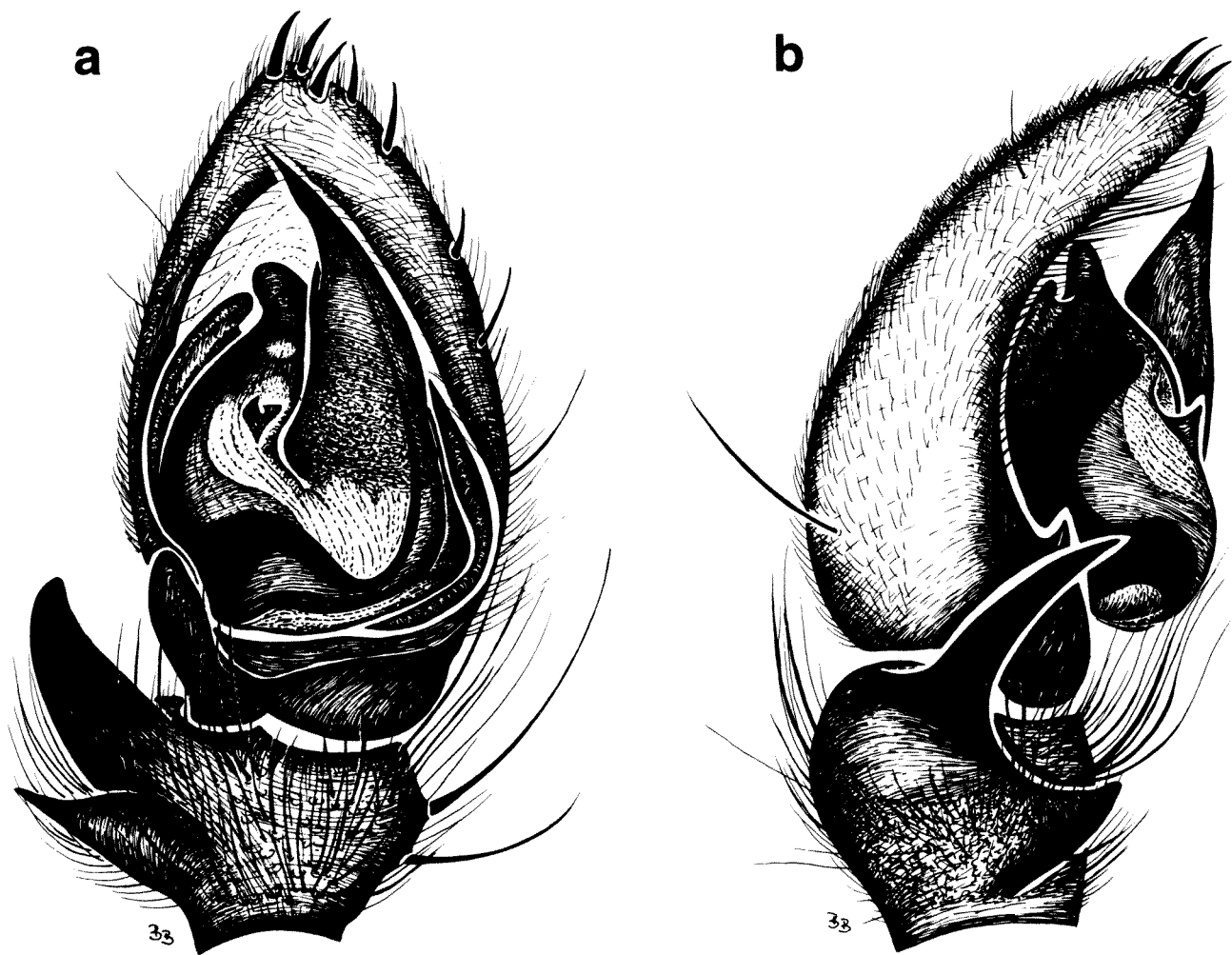


Figure 4 *Storena harveyi* sp. nov.: a, male palp, ventral view; b, male palp, lateral view.

1.01 L. Clypeus 0.9 mm high or 2.7 times width of ALE.

Legs: Measurements and spination (tables 11 and 12).

Male palp (Figs 4a, b): tibia with large dorsolateral apophysis extending forward, slightly curved down, with acute apex; ventrolateral apophysis short, conical, slightly curved upwards. Cymbium rather narrow; lateral margin convex; with short spines and hinged hairs; flange short, rather thick, delimiting very shallow frontal concavity, distal tip acute. Embolus originating in frontal part of tegulum, broad at base, tapering towards sharp tip. VTA short, sclerotised at triangular tip; DTA short, rounded. Lateral ridge poorly developed, distal prong small.

Table 11 *Storena harveyi* Ht ♂, leg measurements.

	F	P	T	Mt	t	Tot
I	3.4	1.5	3.2	3.2	2.3	13.6
II	3.1	1.4	2.5	2.9	2.0	11.9
III	3.0	1.5	2.1	3.2	2.0	11.8
IV	3.4	1.5	2.9	4.2	2.2	14.2

Table 12 *Storena harveyi* Ht ♂, leg spination.

	F	P	T	Mt
I	pl1d2	pl1	pl3v2-1-2-2	v9dw3
II	pl1d3rl2	pl1	pl3v2-2-2-2	v9dw4
III	pl3d3rl2	pl3d2rl1	pl4d3rl2v2-1-2-2	10dispdw4
IV	d3rl1	pl3d2rl1	pl4d4rl4v2-1-2-2	11dispdw5

Distribution

Known only from the type locality in Western Australia.

Etymology

The name is a patronym in honour of M.S. Harvey, curator of Arachnida in the Western Australian Museum, Perth, who first recognised this specimen as a new species.

Key

*Storena harveyi* will key out to *S. deserticola* under couplet 8 of the key provided by Jocqué and Baehr (1992). If “*S. deserticola*” is replaced by “8a” it can be keyed out further as follows:



- 8a. Dorsolateral apophysis blunt, hardly longer than ventrolateral one ..... *S. deserticola*  
 Dorsolateral apophysis sharp, clearly longer than ventrolateral one ..... *S. harveyi*

### *Storena charlotte* Jocqué and Baehr

#### New Material Examined

**Australia: Queensland:** 1 ♀, Einasleigh River, 2 km E. of Einasleigh, river bed, 12 June 1993, B. and M. Baehr (ZSM).

#### Remarks

Considering the distribution of this species, it is not impossible that these are the females of *S. scita* Jocqué and Baehr, so far only known from males.

### *Storena cochleare* Jocqué and Baehr

#### New Material Examined

**Australia: New South Wales:** 1 ♂, Mudgee, 32°36'S, 149°35'E, 27 August 1988, M. McQuiggan (AMS KS19917).

#### Remarks

The embolus of this specimen is shorter than in the type specimen; it is supposed that in the latter the narrow part of the sclerite is lost.

### *Storena formosa* Thorell

#### New Material Examined

**Australia: Western Australia:** 1 ♂, Tammin, 20 December 1959, on verandah at night, B.Y. Main (WAM 94/514); 1 ♀, Mount Cooke, 32°25'S, 116°18'E, 17 January 1993, base of marri, M. Harvey *et al.* (WAM 94/14); 1 ♂, 11 km ENE of Old Kirgulla Rock Hstd., 30°01'S, 122°58'E, 6 August 1993, matured 28 November 1993, on yellow-orange sand with mallee eucalypts, *Acacia* and *Melaleuca*, M. Peterson (WAM 94/32).

### *Storena fungina* Jocqué and Baehr

#### New Material Examined

**Australia: Western Australia:** 1 ♂, 20 km of Newdegate, 8 April 1993, mallee, G. Harold (WAM 94/12); 1 ♂, Tambellup, 34°03'S, 117°39'E, 22 April 1993, in laundry sink, J. Allan (WAM 94/13); 1 ♀, Gibson, Norseman Road, 33°39'S, 121°49'E, 11 September 1989, A. Longbottom, S. 305 (FP6/11) (WAM 93/1276); 1 ♂, Jerramungup, The clerk, A.G. Dept., 33°56'S, 118°55'E, 12 March 1990 (WAM 90/650).

### *Storena metallica* Jocqué and Baehr

#### New Material Examined

**Australia: Queensland:** 1 ♀, Mt. Moffatt National Park, Rotary shelter, ME Queensland, 24°55'S, 147°52'E, open forest, 21 January 1989, I. Stanisik, O. Potter and J. Chaseling (QM S18162). **New South Wales:** 1 ♀, Condamine, 10 km north on Bruce Highway, 28 August 1980, under loose bark (AMS KS19782).

#### Remarks

The original description of this species fails to mention the dense ventral pilosity on T, P and mainly on the F of the legs. This is a character the females share with *S. nuga* of which only the female is known. The internal structure of the epigyne of both species is quite different: in *S. nuga* the short ducts (?) in front of the balloon-shaped spermathecae (?) are curved and transverse whereas in *S. metallica* they are oblique and almost straight.

### *Storena procedens* Jocqué and Baehr

#### New Material Examined

**Australia: Queensland:** 1 ♂, Lake Broadwater, SW track, SE Queensland, 22 November 1987, under log, M. Dennie (QM S1344).

### *Storena recta* Jocqué and Baehr

#### New Material Examined

**Australia: Western Australia:** 1 ♂, Drysdale River Station, 15°42'S, 126°23'E, 2 September 1993, in "cubby" at night, A.F. Longbottom (WAM 94/15).

### *Storena sinuosa* Jocqué and Baehr

#### New Material Examined

**Australia: Western Australia:** 1 ♀, Kurrawong Reserve, 30°50'S, 120°00'E, 12 October 1988, R. McMillan (WAM 93/1274); 1 ♂, Mt. Magnet, 23°04'S, 117°51'E, 2 June 1992, in house, D. Rey (WAM 93/1273); 1 ♂, Maida Vale, 31°57'S, 115°59'E, July–August 1990, S. Gilligan (WAM 93/1275).

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