

## ***Wugigarra kurna* Huber, 2001**

**Huber, B. A. 2001.** The pholcids of Australia (Araneae; Pholcidae): Taxonomy, biogeography, and relationships. *Bull. Amer. Mus. Nat. Hist.* 260: 1-144.

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### ***Wugigarra kurna*, new species**

Figures 17–32

TYPE: Male holotype from Bunyeroo Gorge (31°25'S, 138°34'E), ABC Range, Flinders Range National Park, South Australia, Australia; May 16, 1991 (D. Hirst), in SAM (N1999/717).

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ETYMOLOGY: Named for the Kurna, an aboriginal tribe from the Mount Lofty Range area. The last woman survivor, Ivaritji, died in 1931. The species name is a noun in apposition.

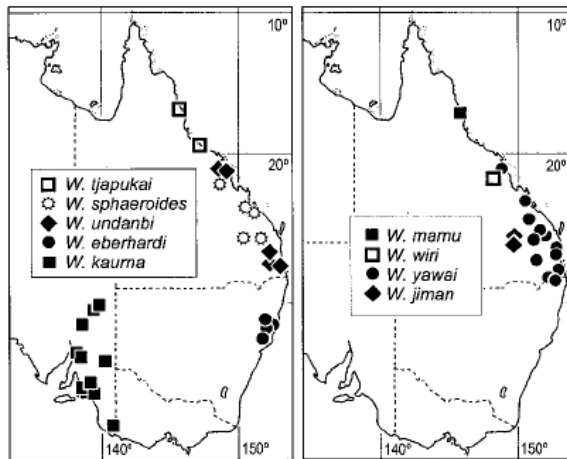
DIAGNOSIS: Large species, distinguished from congeners by the tip of the procurus (figs. 22, 23), the distal bulbal elements (figs. 24, 25), the shape of the epigynum (fig. 26), and the three pairs of lateral spots on the car-

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apace (fig. 18). The AMS has a possibly closely related species from Capertee Valley (~33°10'S, 150°25'E), differing with respect to the procurus tip (AMS KS44134).

MALE (holotype): Total length 4.8, carapace width 2.03. Leg 1: 47.0 (12.8 + 0.8 + 12.5 + 18.1 + 2.8), tibia 2: 8.9, tibia 3: 6.7, tibia 4: 8.9; tibia 1 l/d: 63. Habitus and prosoma shape as in figs. 17–19. Carapace pale ochre with brown marks as in fig. 18. Ocular area pale ochre, slightly darker laterally; distance PME-PME 0.215; diameter PME 0.145; distance PME-ALE 0.065; diameter AME 0.095. Clypeus with pair of dark stripes (fig. 19); sternum brown, with small

yellowish speckles. Chelicerae light ochre-brown, with pair of black pointed apophyses medially and low humps at their bases (fig. 21); apophyses visible in lateral view (fig. 17). Stridulatory files as in fig. 31. Palps as in fig. 20, mostly ochre-yellow, only procurus and bulb partly brown to black; procurus tip and bulb distinctive, as in figs. 22–25. Palpal tarsal organ as in fig. 30. Legs ochre to light brown, dark rings on femora subdistally, patellae + tibiae proximally, and tibiae subdistally; with many curved hairs on tibiae and metatarsi 1–3; without spines and vertical hairs; retrolateral trichobothrium of tibia 1 at 8%. Tarsus 1 distally with ~15 fair-



Maps 4, 5. Distribution of *Wugigarra* species: *tjapukai* group.

ly distinct pseudosegments; proximally pseudosegmentation difficult to see. Opisthosoma as in fig. 17, gray, with many black and some white spots except ventrally. Genital plate only slightly darker, about trapezoidal; gonopore without epiandrous spigots (fig. 32). Plate in front of spinnerets indistinct. Two spigots on ALS (fig. 29, showing also the usual two spigots on PMS).

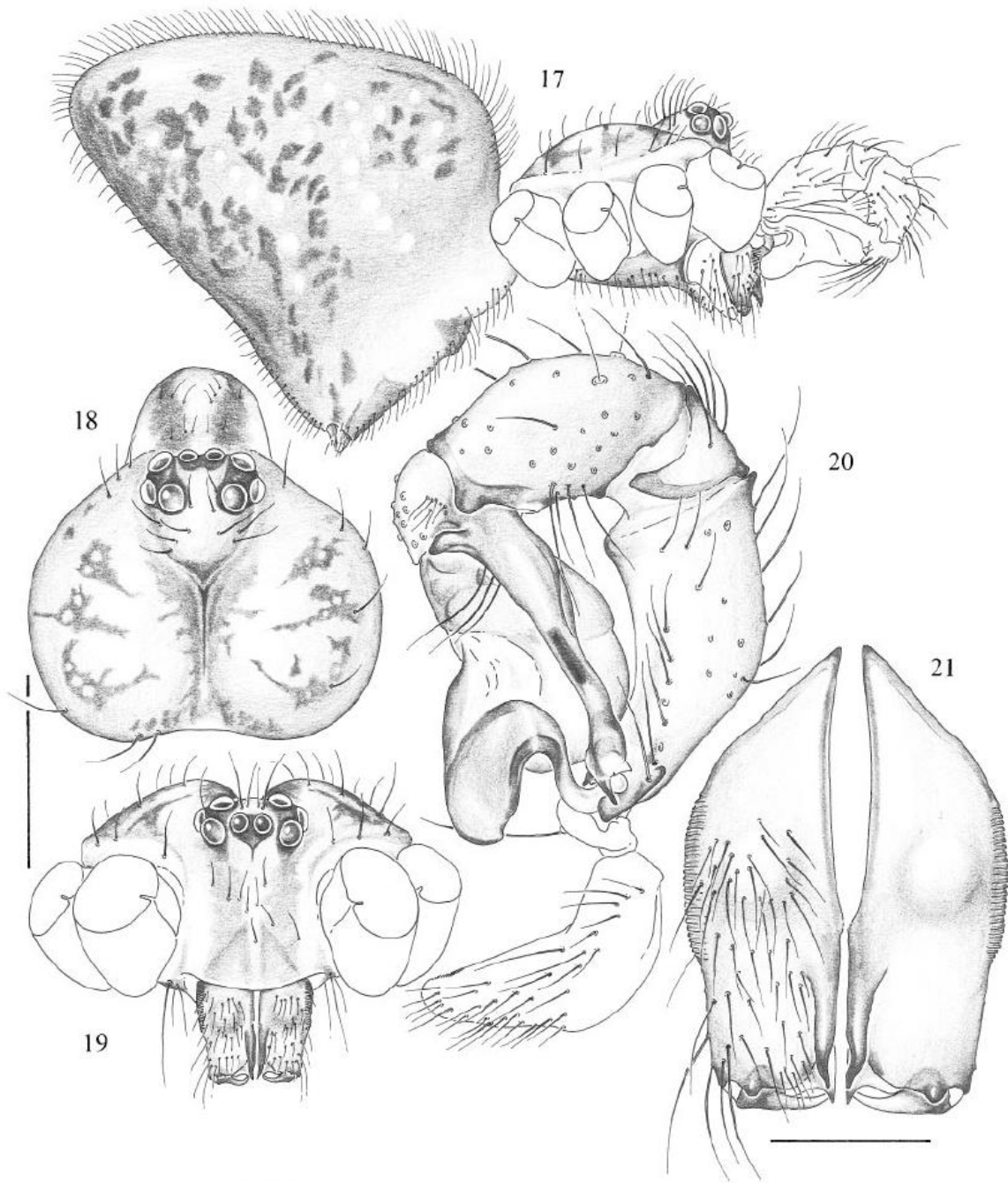
**VARIATION:** There is an impressive north-south clinal variation, especially in size—tibia 1 in 15 males from north of latitude 32°S: 10.5–13.7 ( $\bar{x}$  = 11.3), in 9 males from south of 34°S: 7.3–8.9 ( $\bar{x}$  = 8.3); the males from between 32° and 34°S have intermediate values: 8.9, 10.3, 10.3, 11.2. The same pattern occurs in females (see below). In addition, the number and size of teeth prolaterally on the male genital bulb follows a similar pattern: most specimens from northern populations have several teeth (as shown in figs. 24, 25); towards the south, these teeth get fewer and smaller, until they are completely absent.

**FEMALE:** In general very similar to male—tibia 1 in 8 females from north of latitude 32°S: 7.5–10.4 ( $\bar{x}$  = 9.1), in 8 females from south of 34°S: 5.5–8.0 ( $\bar{x}$  = 6.7). Epigynum as in fig. 26, anterior plate laterally brown, medially whitish with pocket on short transparent scape; dorsal view as in fig. 27. Spigots on ALS as in male (fig. 28).

**DISTRIBUTION:** Known from several localities in southeastern South Australia (map 4).

**MATERIAL EXAMINED:** AUSTRALIA: *South*

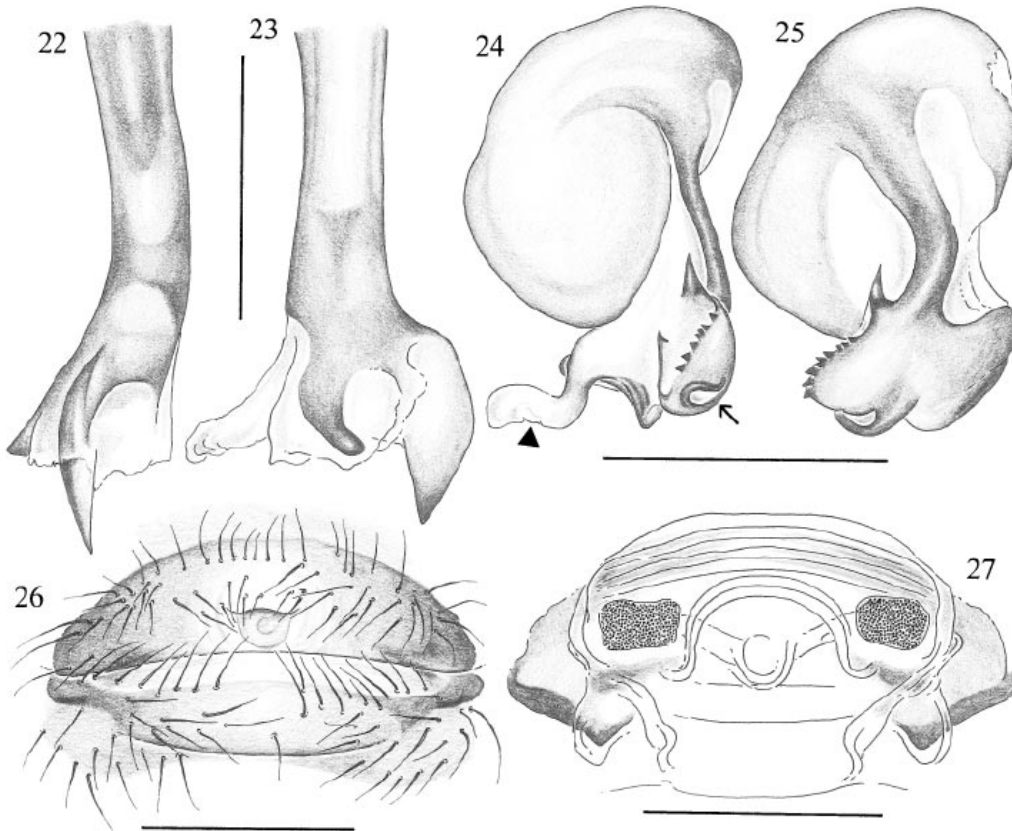
*Australia:* Flinders Range National Park: Male holotype above, with 5♂ 2♀ 2 juveniles (SAM N1999/718–24); Flinders Range National Park, Heysen Range, Bunyeroo Gorge (31°25'S, 138°32'E), May 16, 1990 (D. Hirst), 3♂ 2♀ 1 juvenile in SAM (N1999/712–6); Gammon Ranges National Park, Arcoona Creek near Sambot WH (30°27'S, 139°02'E), at night on cliffs, May 4, 1989 (D. Hirst), 2♂ 2♀ (SAM N1999/706–9); rocky ridge NE of Arcoona Creek (30°26'S, 138°58'E), May 3, 1989 (D. Hirst), 1♂ 2 juveniles (SAM N1999/710); near Grindells Hut, Gammon Ranges National Park (30°29'S, 139°13'E), Apr. 1985 (B. Guerin), 1♂ (SAM N1999/711); Gammon Ranges National Park, on cliff face, Weetootla Gorge (30°29'S, 139°14'E), Oct. 24, 1999 (D. Hirst), 1♂ 1 juvenile (SAM NN9036); Mawson Plateau (30°07'S, 139°25'E), Oct. 21–22, 1999 (D. Hirst), in rocky creek bank, 1♂ 4♀ (SAM NN9031–35); Alligator Gorge, Mt. Remarkable National Park (32°45'S, 138°03'E), on cliffs in gorge, Jan. 25, 1987 (D. Hirst), 1♂ 1♀ (SAM N1999/728–29); Melrose camping area (32°50'S, 138°11'E), Apr. 18, 1987 (D. Hirst), 3♀ (SAM N1999/730–2); Spring Ck., near Melrose (32°50'S, 138°11'E), Apr. 21, 1973 (M. R. Gray), 1♂ (AMS KS51544); Mambray Creek camp area (32°51'S, 138°00'E), from tree roots, steep creek bank, Oct. 4, 1988 (D. Hirst), 2♂ 1♀ (SAM N1999/725–7); Cave Cliff National Trust Reserve, Hd Parcoola (33°37'S, 140°03'E), Apr. 25, 1982 (J. J. Szent-Ivany), 1♂ 1♀ (SAM N1999/773–4); Cromer Conservation Park (34°47'S, 138°59'E), Sept. 7, 1985 (B. Guerin), under log, 1♀ (SAM N1999/733); Mt. Lofty Ranges, Castambul, Torrens Gorge (34°52'S, 138°46'E), Nov. 29, 1986 (D. Hirst), 2♂ 2♀ (SAM N1999/740–3); Adelaide (34°56'S, 138°36'E), no date (R. H. Pulleine), 1♂ 3♀ (poorly preserved) (SAM N1999/735–8); Adelaide, River Torrens (34°56'S, 138°36'E), 1903 (R. H. Pulleine), 1♀ (SAM N1999/734); Adelaide, Windsor Gardens (34°56'S, 138°37'E), Dec. 1–16, 1990 (D. Hirst), 1♂ (SAM N1999/739); Mt. Lofty Ranges, Belair (35°00'S, 138°38'E), Mar. 17, 1990 (L. N. Nicholson), 1♂ 1♀ (SAM N1999/748–9); same locality, Feb. 12, 1990 (L. N. Nicholson), 1♀ (SAM N1999/



Figs. 17–21. *Wugigarra kurna*, n. gen., n. sp., male. 17. Habitus, lateral view. 18, 19. Prosoma, dorsal and frontal view. 20. Left palp, retrolateral view. 21. Chelicerae, frontal view. Scale lines: 1 mm (18, 19), 0.3 mm (21).

750); same locality, Dec. 20, 1989 (L. N. Nicholson), 4♀ (SAM N1999/744–7); same locality, Jan. 15, 1991 (L. N. Nicholson), 1♀ (SAM N1999/751); same locality, May 10, 1992 (L. N. Nicholson), 1♀ (SAM N1999/

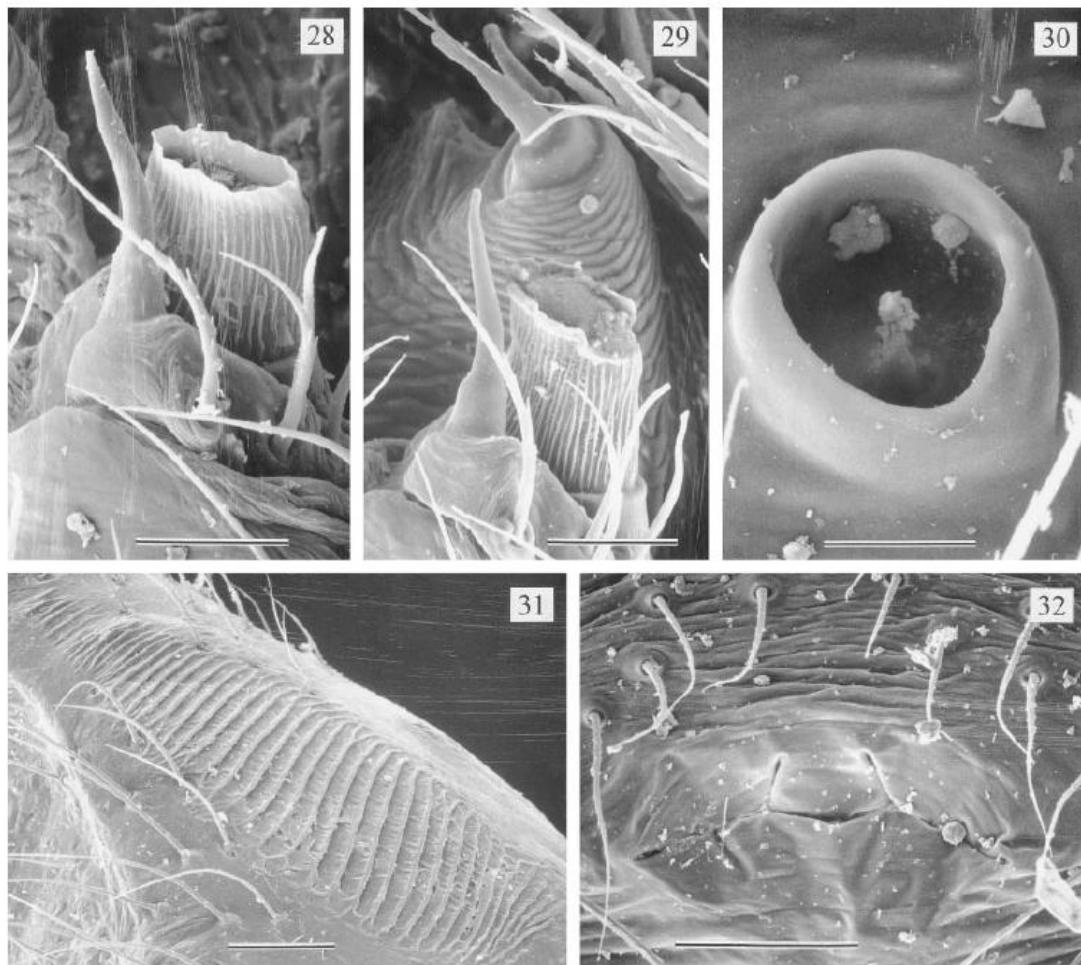
753); same locality, May 16, 1991 (L. N. Nicholson), in garden shed, 1♀ (SAM N1999/752); Mt Lofty Ranges, Loftia Park (35°02'S, 138°42'E), Sept. 14, 1989 (D. Hirst), 1♂ (SAM N1999/755); same locality,



Figs. 22–27. *Wugigarra kurna*, n. gen., n. sp. 22, 23. Left procursus tip, retrolateral (22) and dorsal (23) views. 24, 25. Left genital bulb, prolateral (24) and dorsal (25) views; shafted arrow: sperm duct opening; unshafted arrow: worm-shaped process. 26, 27. Epigynum, ventral (26) and dorsal (27) views. Scale lines: 0.5 mm (24–27), 0.2 mm (22, 23).

Mar. 20, 1990 (D. Hirst), 4♂ 3♀ 2 juveniles (SAM N1999/756–63); Mt. Lofty Ranges, Hahndorf (35°02'S, 138°49'E), in fowl house, Dec. 1983 (B. Guerin), 3♀ (SAM N1999/764–6); Mt. Lofty Ranges, Coromandel Valley (35°02'S, 138°38'E), Apr. 1995 (L. N. Nicholson), 1♀ (SAM N1999/754); Mt. Lofty Ranges near Clarendon (35°07'S, 138°38'E), June 25, 1978 (A. F. Lees), 1♂ 2♀ (SAM N1999/768–70); Nappyalla (35°20'S, 139°07'E), Mar. 1995 (J. Eckert), 1♀ (SAM N1999/771); Snowgum Reserve, Carolyn Forest (37°56'S, 140°56'E), Apr. 20, 1979 (D. C. Lee), under *Eucalyptus* bark, 1♀ (SAM N1999/772).





Figs. 28–32. *Wugigarra kaurna*, n. gen., n. sp. 28. Female ALS, with two spigots. 29. Male ALS (in front) and PMS (in back), with two spigots each. 30. Male palpal tarsal organ. 31. Stridulatory files on male chelicerae. 32. Male gonopore, without epiandrous spigots. Scale lines: 60  $\mu\text{m}$  (31, 32), 20  $\mu\text{m}$  (28, 29), 10  $\mu\text{m}$  (30).