

Trichocyclus nullarbor Huber, 2001

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

p. 59

Trichocyclus nullarbor, new species

Figures 186–197

TYPE: Male holotype from northern overhang, Knowles Cave (31°08'S, 130°30'E), Nullarbor Plain, South Australia, Australia; Sept. 29, 1988 (D. Hirst), in SAM (N1999/842).

ETYMOLOGY: Named for the Nullarbor Plain, where this species is common. The species name is a noun in apposition.

DIAGNOSIS: Easily distinguished from most congeners by the long narrow apophyses on the male chelicerae (fig. 190); from *T. kokata* (which has identical chelicerae) by the shape of the dorsal apophysis on the procurus (compare figs. 197 and 201); from *T. hirsti* by the less voluminous procurus (compare figs. 197 and 198), and by the apophyses on the male chelicerae (compare figs. 190 and 199).

MALE (holotype): Total length 3.7, carapace width 1.65. Leg 1: 31.8 (8.8 + 0.7 + 8.7 + 11.7 + 1.9), tibia 2: 6.3, tibia 3: 4.5, tibia 4: 6.2; tibia 1 l/d: 54. Habitus and prosoma shape as in figs. 186–189; carapace pale ochre with light brown pattern as in fig. 187. Eye pattern as in fig. 188; distance PME-PME 0.185; diameter PME 0.105; distance PME-ALE 0.045; diameter AME 0.135. Clypeus with wide, light brown band; sternum pale ochre, labium darker. Chelicerae ochre with pair of long, narrow frontal apophyses, smaller cones at their bases, and stridulatory ridges (fig. 190). Palps as in figs. 191 and 192, procurus as in fig. 197. Legs ochre, with indistinct darker rings on femora (subdistally) and tibiae (proximally and subdistally), patellae also darker; tips of femora and tibiae whitish; legs without spines, curved, and vertical hairs; retrolateral trichobothrium of tibia 1 at 15%; tarsal pseudo-segments very indistinct, not countable. Opisthosoma ochre gray, dorsally with some blackish spots; genital plate light brown, about square.

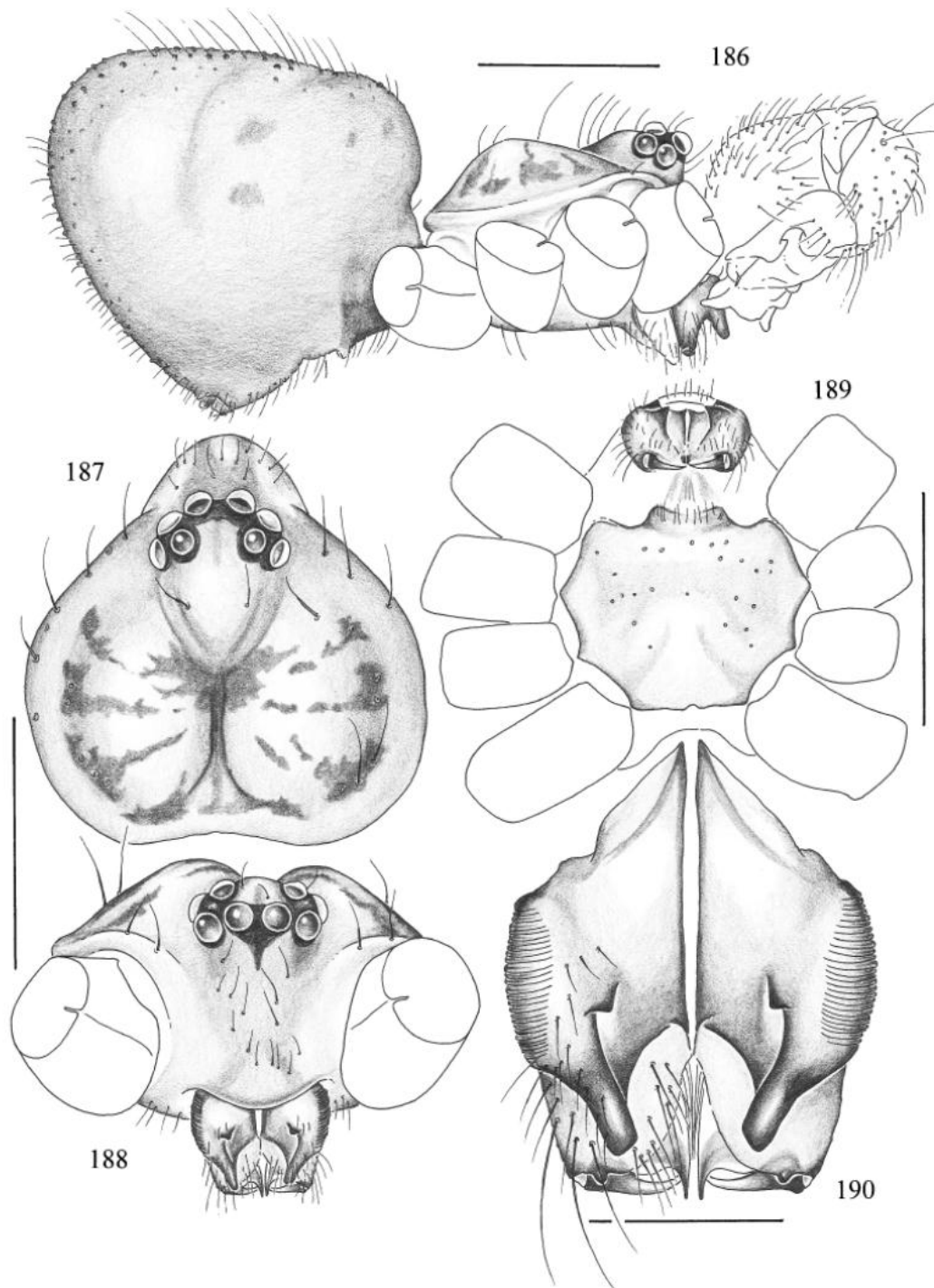
VARIATION: Tibia 1 in 19 males: 6.5–10.4 (\bar{x} = 8.1). The specimens from near Perth have slightly narrower dorsal apophyses on the procurus, and are therefore assigned tentatively.

FEMALE: In general very similar to male, but opisthosoma usually much higher (i.e.,

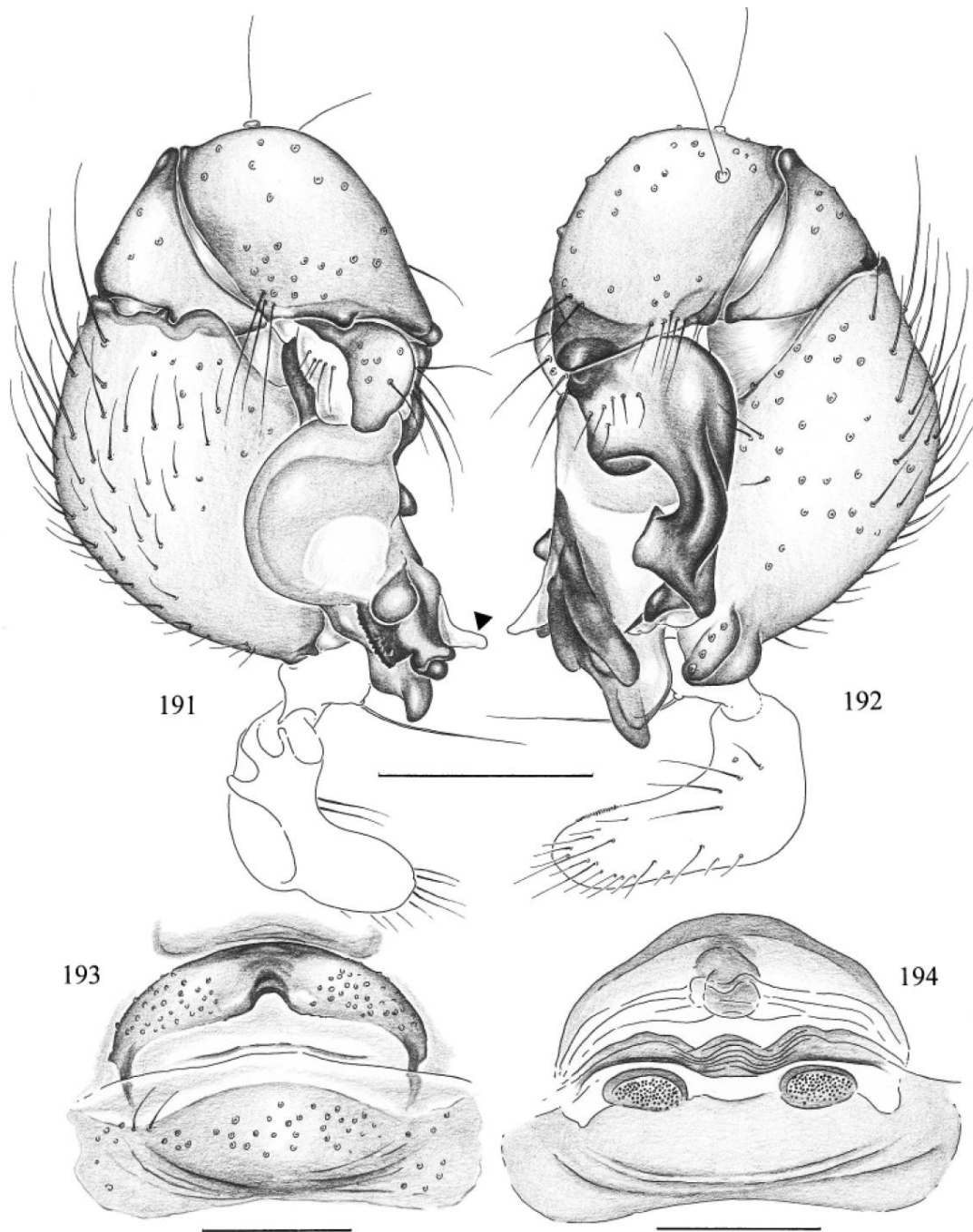
dorsoposteriorly more elongated), chelicerae without stridulatory ridges. Tibia 1 in 11 females: 6.8–10.3 (\bar{x} = 8.2). Palpal tarsus tip as in fig. 196. Opisthosoma frontodorsally apparently without humps. Epigynum as in fig. 193, dorsal view as in fig. 194. Several piriform gland spigots on ALS (fig. 195).

DISTRIBUTION: Widely distributed in western South Australia and southern Western Australia (map 9).

MATERIAL EXAMINED: AUSTRALIA: *South Australia*: Nullarbor Plain: Knowles Cave: Male holotype above, with 1 ♀ (SAM N1999/843); same data, 2 ♂ 5 ♀ several juveniles (SAM N1999/844–50); Koonalda area (31°24'S, 129°50'E), Feb. 1957 (C. Warner), 1 ♂ (SAM N1999/841); Koonalda Cave (31°24'S, 129°50'E), Apr. 3, 1970 (J. Lowry), 1 ♂ (WAM 93/2356); Warbla Cave (31°31'S, 129°07'E), Oct. 10, 1966 (J. Lowry), 1 ♀ (WAM 93/2377); unnamed cave 8.6 km E of Bore no. 5 off Murrawinjine Caves Road, N of Nullarbor Station (~31°10'S, 131°00'E), Feb. 19, 1985 (N. Poulter), 1 ♂ 1 juvenile (AMS KS16911); unnamed cave 14.5 km E of Bore no. 5 off Murrawinjine Caves Road, N of Nullarbor Station (~31°10'S, 131°00'E), Feb. 18, 1985 (N. Poulter), 1 juvenile assigned tentatively (AMS KS16909). *Western Australia*: Nullarbor Plain: Top of Eucla Pass (31°39'S, 128°52'E), Mar. 9, 1979 (collector not given), 1 ♂ 1 juvenile (AMS KS14997); unnamed cave (31°11'S, 128°29'E), Sept. 14, 1966 (J. Lowry), 1 ♂ 3 ♀ 3 juveniles (WAM 96/39–45); Old Homestead Cave (31°09'S, 127°56'E), Sept. 7, 1966 (J. Lowry), 1 ♀ (WAM 93/2382), assigned tentatively; Skink Hole (31°28'S, 127°55'E), Sept. 10, 1966 (J. Lowry), 1 ♂ (WAM 93/2353); degraded doline S of Mullamullang Cave (31°45'S, 127°15'E), Jan. 8, 1966 (J. Lowry), 1 ♀ (WAM 96/64); Kestral Cavern no.1 (31°39'S, 127°13'E), cave doline, Jan. 9, 1972 (M. Gray), 1 ♂ (AMS KS56196); Firestick Cave (31°46'S, 127°02'E), Oct. 17, 1966 (J. Lowry), 1 ♂ (WAM 93/2379); Dingo Cave (31°51'S, 126°44'E), Oct. 28, 1968 (J. Lowry), 3 ♀ 1 juvenile (WAM 93/2320–3) assigned tentatively; Mullamullang Cave (31°44'S, 126°44'E), north doline, Jan. 3, 1966 (J. Lowry), 1 ♂ (WAM 93/2381); same locality, doline, Aug. 30, 1966 (J. Lowry),



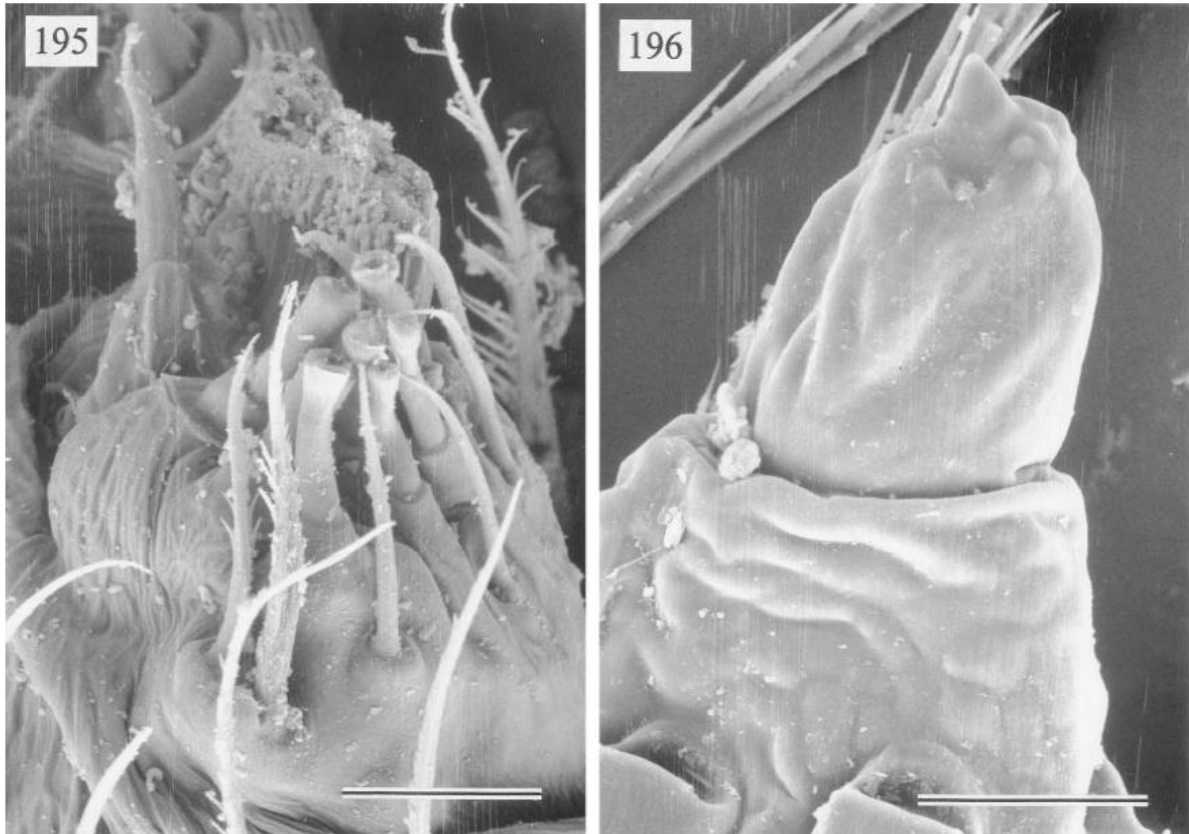
Figs. 186–190. *Trichocyclus nullarbor*, male. **186.** Habitus. **187–189.** Prosoma, dorsal, frontal, and ventral views. **190.** Chelicerae, frontal view. Scale lines: 1 mm (186–189), 0.3 mm (190).



Figs. 191–194. *Trichocyclus nullarbor*. **191, 192.** Left male palp, prolateral (191) and retrolateral (192) views; arrow: transparent bulbal process. **193, 194.** Epigynum, ventral (193) and dorsal (194) views. Scale lines: 0.5 mm.

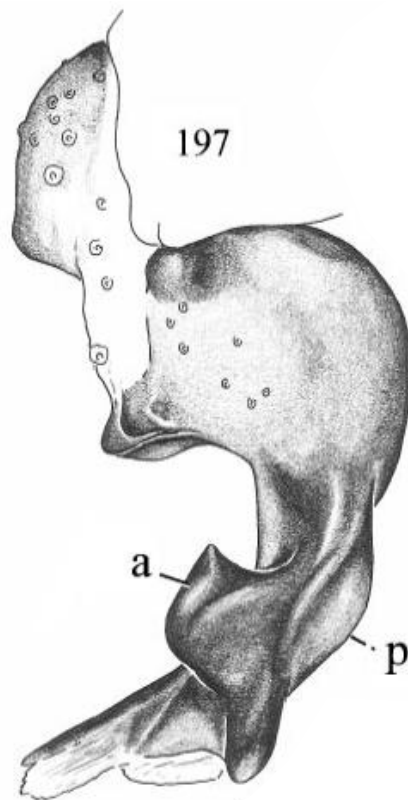
3 ♀ (WAM 92/2385–7); same locality, Jan. 6, 1972 (M. Gray), 1 ♀ (AMS KS56198); Haig Cave (30°44'S, 126°23'E), July 29, 1966 (J. Lowry), 1 ♂ (WAM 93/2374); caves at 30°51'S, 126°07'E, Apr. 15, 1990 (A. Baynes

“et al.”), 1 ♂ 1 ♀ (WAM 99/1643–4); Cocklebiddy Cave (31°58'S, 125°53'E), Jan. 10, 1966 (J. Lowry), 2 ♂ (WAM 93/2236–7); Grass Patch (33°14'S, 121°44'E), house ceiling, Jan. 3, 1988 (A. F. Longbottom), 2 ♂ 1 ♀

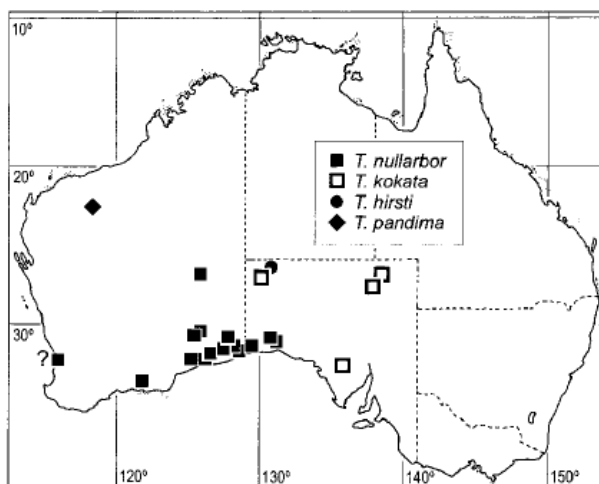


Figs. 195, 196. *Trichocylus nullarbor*, female. **195.** ALS, showing several piriform gland spigots. **196.** Tip of palp. Scale lines: 20 μm .

(WAM 99/1721–3); Great Victoria Desert, S of Skipper Knob ($\sim 26^{\circ}57'S$, $126^{\circ}20'E$), wall under overhang, Aug. 12, 1970 (J. Lowry), 1 δ 2 f (WAM 99/2112–4). The following material from near Perth is assigned tentatively (see above): Walyunga ($31^{\circ}44'S$, $116^{\circ}04'E$), Nov. 28, 1981 (D. Hirst), 1 δ 1 f (SAM N1999/863–4); between Chittering and Pearce ($\sim 31^{\circ}33'S$, $116^{\circ}03'E$), no date (G. H. Lowe), 1 δ (WAM 99/1638); Darlington ($31^{\circ}54'S$, $116^{\circ}04'E$), 1975–79 (G. H. Lowe), 1 δ (WAM 99/1639); Gooseberry Hill on Darling Swamp near Perth, Aug. 26, 1971 (J. Lowry), 1 δ (AMS KS45158).



Figs. 197–201. *Trichocylus nullarbor* (197), 197, 198,
201. Left procursi, retrolaterodorsal views; “a”, “p” = apophysis and pocket; asterisk: weak zone on cymbium; unshafted arrow: more prominent in other male studied. **199.** Male chelicerae, frontal view. **200.** Epigynum, ventral view. Scale lines: 0.3 mm (197–199, 201), 0.5 mm (200).



Map 9. Distribution of *Trichocylus* species: *nullarbor* group.