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A New Genus of the Spider Family Orsolobidae (Araneae, Dysderoidea) from Brazil

NORMAN I. PLATNICK¹ AND ANTONIO D. BRESCOVIT²

ABSTRACT

A new genus and species, *Losdolobus parana*, are described for the most northern known New World orsolobid, found in southern Brazil. The species resembles those of *Orsolobus* Simon and

Falklandia Forster and Platnick in having a relatively low tarsal organ, but has a much simpler male palp and a uniquely expanded female palpal tibia.

INTRODUCTION

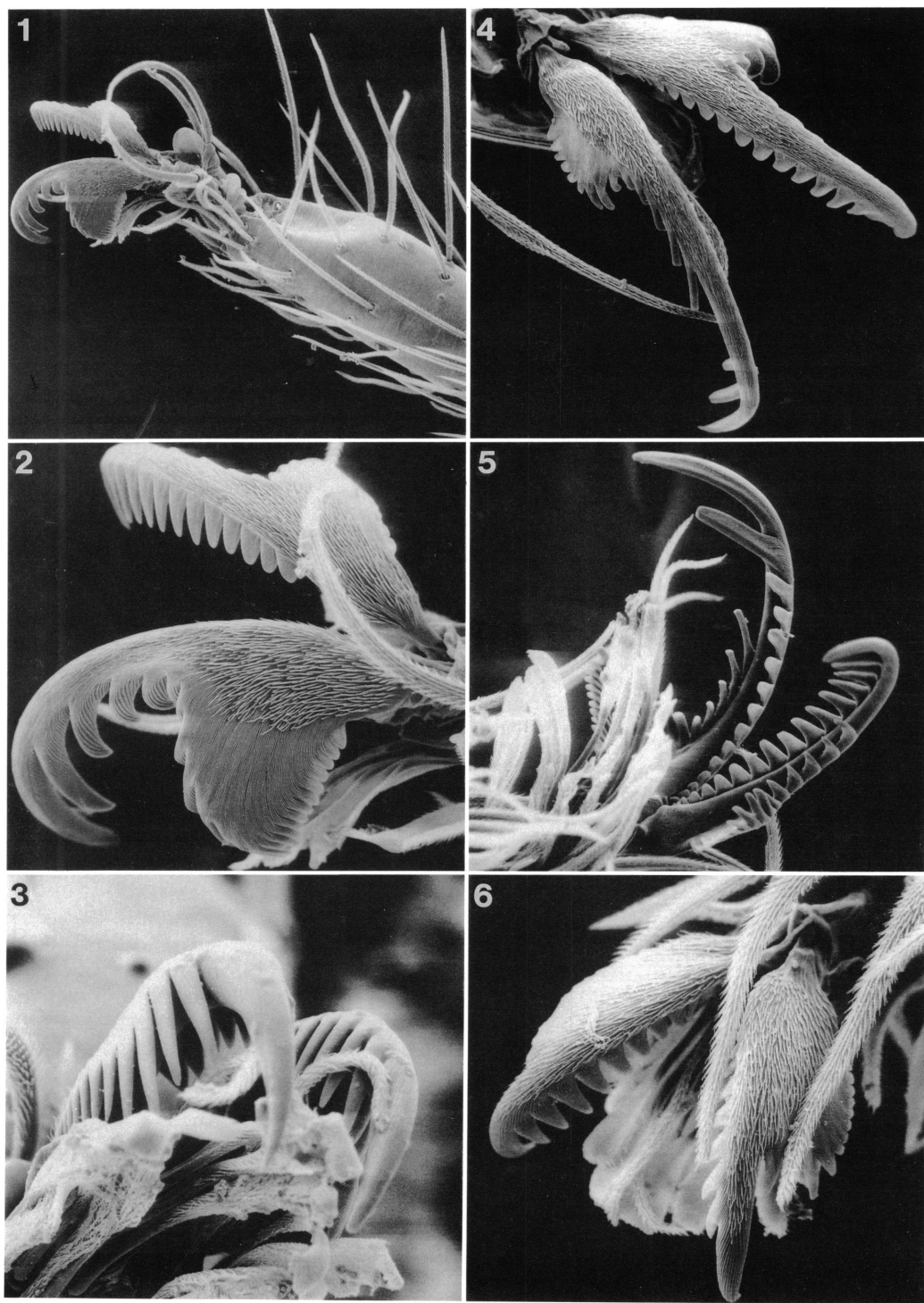
Orsolobids are a characteristic austral group; the 27 genera and 174 species described to date are found in Australia, Tasmania, New Zealand, the Auckland and Campbell Islands, Chile, Argentina, the Falkland Islands, South Africa, and Malawi (Forster and Platnick, 1985; Griswold and Platnick, 1987). In South America, they have been recorded only from southern Chile (ranging no farther north than Santiago) and adjacent

parts of Argentina. It was therefore a surprise to find specimens of an orsolobid species from the state of Paraná in southern Brazil. Detailed study of those specimens indicates that they belong to a previously unknown genus.

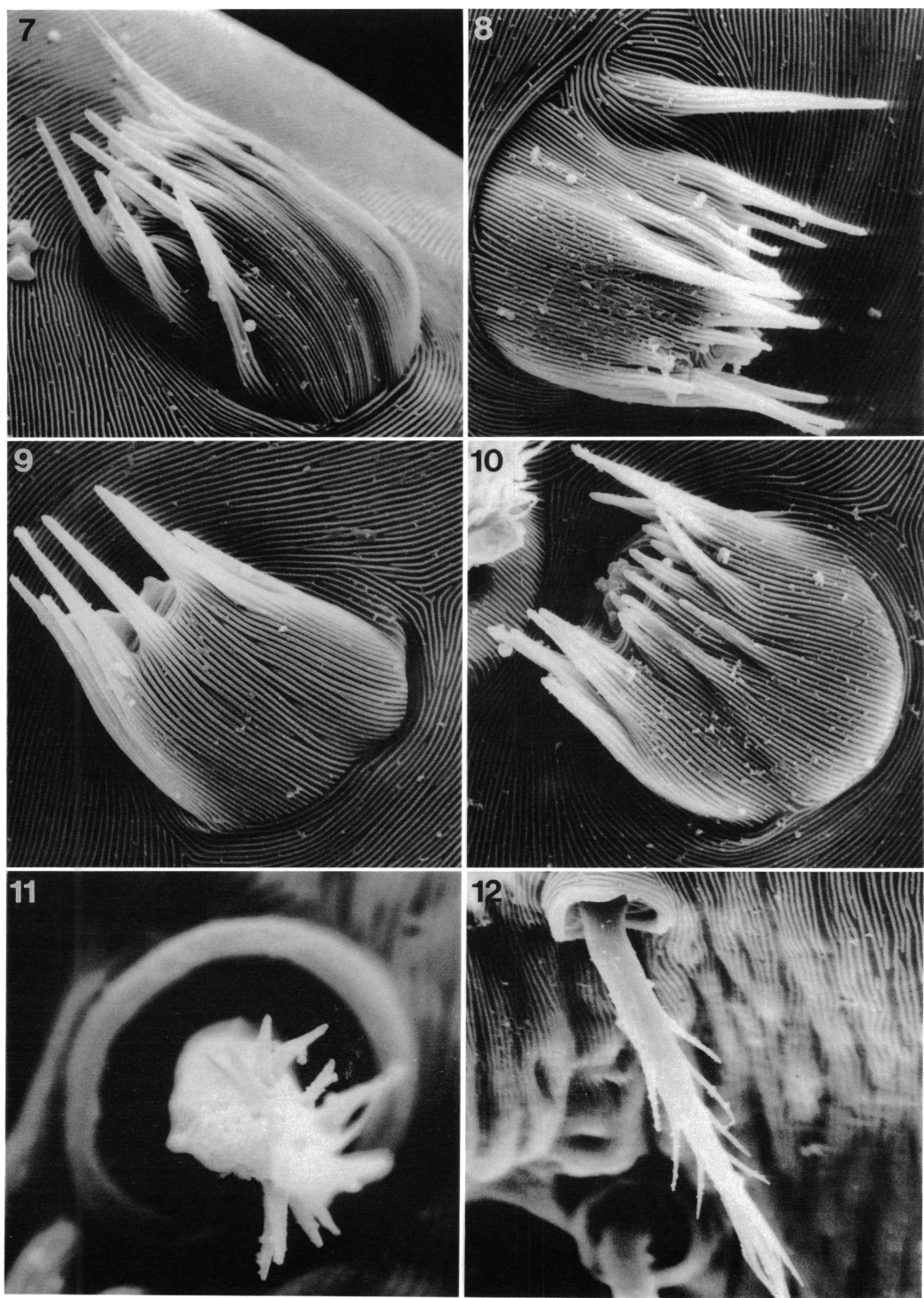
The specimens were collected in a Malaise trap as part of an entomological survey of Paraná (Marinoni and Dutra, 1991). The type locality, São José dos Pinhais is in subtropical mata (Maack, 1981) in the Sierra do Mar, at

¹ Curator, Department of Entomology, American Museum of Natural History; Adjunct Professor, Department of Biology, City College, City University of New York; Adjunct Professor, Department of Entomology, Cornell University.

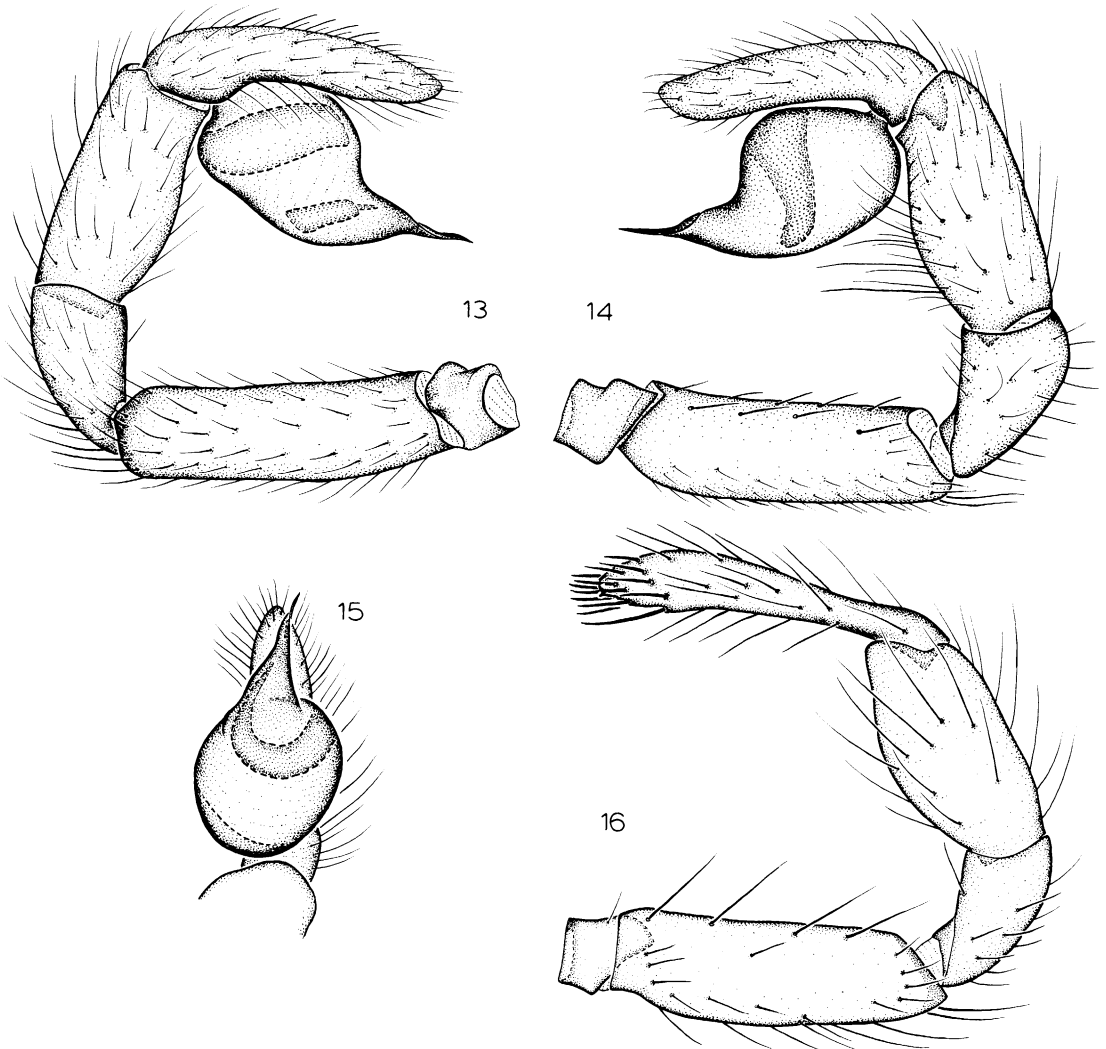
² Museu de Ciências Naturais, Rua Dr. Salvador Franca 1427, C. Postal 1188, Porto Alegre, RS 90690-000, Brazil.



Figs. 1-6. *Losdolobus parana*, new species, tarsal claws. 1, 2. Female, leg I, oblique dorsal views. 3. Female, leg III, distal view. 4. Male, leg I, dorsal view. 5. Male, leg II, ventral view. 6. Male, leg III, dorsal view.



Figs. 7-12. *Losdolobus parana*, new species, tarsal structures. 7-10. Tarsal organ, dorsal views. 7. Female, leg I. 8. Male, leg I. 9. Female, leg III. 10. Male, leg III. 11. Proprioreceptor bristle, female, leg I, dorsal view. 12. Same, male, leg III, lateral view.



Figs. 13–16. *Losdolobus parana*, new species. 13. Left male palp, prolateral view. 14. Same, retrolateral view. 15. Same, ventral view. 16. Left female palp, retrolateral view.

an elevation of 1050 m; the flora is rich in tree-ferns, epiphytes, lianas, and palms. The mean annual temperature at the site is 17–18°C, and the mean annual rainfall 190–200 cm.

We thank Peling Fong-Melville and Mohammad Shadab of the American Museum of Natural History for assistance with scanning electron micrographs and illustrations. Helpful reviews of a draft of the manuscript were provided by Charles Griswold and John Murphy. The format of the descriptions follows that of Forster and Platnick (1985); all measurements are in mm.

SYSTEMATICS

Losdolobus, new genus

TYPE SPECIES: *Losdolobus parana*, new species.

ETYMOLOGY: The generic name is a contraction of “los dos” (the two) and *Orsolobus*, referring to the two Argentine arachnologists, Pablo Goloboff and Martín Ramírez, who have helped the first author collect orsolobids in Argentina and Chile; the gender is masculine.

DIAGNOSIS: Members of the genus differ from the other American orsolobids as fol-

lows: from *Mallecolobus* Forster and Platnick, *Chileolobus* Forster and Platnick, and *Osornolobus* Forster and Platnick by the absence of purple pigment on the abdomen, from *Falklandia* by the presence of spines on tibiae III and IV, and from *Orsolobus* Simon by the simple male palpal bulb (figs. 13–15) and inflated female palpal tibia (fig. 16). The latter character, and the (possibly associated) near obsolescence of the female palpal claw, are apparently unique within the family.

DESCRIPTION: Moderate size (total length 2.3–3.2) orsolobids with dorsum of abdomen white, without purple pigment but with latticelike arrangement of darker areas separated by lighter stripes. Chelicerae with two promarginal and two retromarginal teeth, retromarginal pair more distally situated, more widely spaced than promarginal pair. Sternum not produced anteriorly behind labium, widely truncated posteriorly, with short triangular extensions to each coxa and elevations opposite coxae I–III. Colulus relatively wide, heavily setose. Female genitalic structure unknown (the genitalia of the only known female were unfortunately lost during preparation). Long spines present on tibiae and metatarsi III, IV. Claws long, those on legs I, II with large lateral flanges (figs. 1–6), with tufts of spatulate hairs. Tarsal organ relatively low, surmounted by numerous relatively short cuticular lobes, with two short receptor lobes (figs. 7–10); proprioceptor bristles fringed (figs. 11, 12). Female palp with inflated tibia, extending beyond base of tarsus (fig. 16); palpal claw nearly obsolete, represented only by tiny, triangular protrusion near ventral edge of palpal tip; distal end of tarsus with several heavy spines (fig. 16). Male palp with all segments slender, heavily sclerotized, without tooth on anterodorsal surface of coxa; cymbium elongate, tubular; bulb small, simple, tapering to long, sharp embolus (figs. 13–15). Respiratory system not examined.

Losdolobus parana, new species

Figures 1–16

TYPES: Male holotype, female allotype, and male paratype from São José dos Pinhais, 25°34'S, 49°01'W, Paraná, Brazil (Aug. 4, 1986; Profaupar staff), deposited in Museu de Ciências Naturais, Porto Alegre.

ETYMOLOGY: The specific name is a noun in apposition taken from the type locality.

DIAGNOSIS: With the characters of the genus, male palp as in figures 13–15, and female palp as in figure 16.

MALE: Total length 2.37. Carapace 1.14 long, 0.89 wide. Abdomen 1.17 long, 0.83 wide. Carapace brownish yellow, darkest anteriorly; chelicerae and labium light brown, endites brownish yellow, sternum yellow; abdomen white with latticelike arrangement involving narrow, pale, longitudinal median stripe, pair of narrow, pale, paramedian longitudinal stripes, and about six pale, narrow transverse stripes isolating dusker, more setose areas; legs and palpi yellow, darkest at base of femora. Eye length ratio, ALE:PME:PLE, 12:14:13; PME separated by their radius from ALE; PLE separated by 2.5 times their length. Chelicerae 0.59 long. Sternum as wide as long. Leg spination: tibiae: III p0-1-0, v0-2-2, r0-0-2; IV p1-0-0, v0-1p-2, r0-1-2; metatarsi: III p0-1-1, v0-2-2, r0-0-1; IV p1-1-1, v0-2-3, r1-0-1. Tarsal organ with 12 or more cuticular lobes. Claws relatively long, with wide lateral flanges, especially on anterior legs. Leg measurements:

	I	II	III	IV	Palp
Femur	1.32	1.34	1.07	1.43	1.13
Patella	0.41	0.45	0.38	0.45	0.20
Tibia	1.24	1.22	0.86	1.15	0.29
Metatarsus	1.24	1.22	0.95	1.32	
Tarsus	0.49	0.57	0.38	0.42	0.39
Total	4.70	4.80	3.64	4.77	2.01

Palpal bulb oval, sharply constricted at two-thirds its length, then tapering gradually to sharp embolus (figs. 13–15).

FEMALE: Total length 3.11. Carapace 1.26 long, 0.96 wide. Abdomen 1.90 long, 1.34 wide. Coloration as in male except abdominal latticelike pattern much less regular, consisting of numerous, variously shaped dusker blotches separated by narrow pale lines. Eye length ratio, ALE:PME:PLE, 7:7:6; PME separated by one-third their width from ALE; PLE separated by three times their length. Chelicerae 0.63 long. Sternum slightly wider than long. Leg spination: tibiae: III d0-1-0, p0-1-1, v0-1p-2, r0-0-1; IV p1-0-1, v0-0-2, r1-1-1; metatarsi: III p1-0-1, v0-1p-2, r1-0-

1; IV p1-1-1, v0-1p-2, r1-1-1. Tarsal organ and claws as in male. Leg measurements:

	I	II	III	IV	Palp
Femur	1.33	1.34	1.14	1.50	0.47
Patella	0.48	0.47	0.46	0.50	0.17
Tibia	1.28	1.23	0.93	1.23	0.34
Metatarsus	1.20	1.32	1.04	1.50	—
Tarsus	0.46	0.49	0.42	0.41	0.49
Total	4.75	4.85	3.99	5.14	1.47

Palpal tibia swollen, much wider than other segments, expanded distally beyond articulation with tarsus (fig. 16).

OTHER MATERIAL EXAMINED: None.

DISTRIBUTION: Known only from eastern Paraná, Brazil.

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