

## SHORT COMMUNICATION

### A NEW SPECIES OF *AUSTROCHILUS* FROM CHILE (ARANEAE, AUSTROCHILIDAE, AUSTROCHILINAE)

**Cristian J. Grismado and Lara Lopardo:** Museo Argentino de Ciencias Naturales  
“Bernardino Rivadavia”, Av. Angel Gallardo 470, C1405DJR, Buenos Aires,  
Argentina

**Norman I. Platnick:** Division of Invertebrate Zoology, American Museum of Natural  
History, Central Park West at 79th Street, New York, NY 10024-5192 USA

**ABSTRACT.** *Austrochilus forsteri* new species, (Araneae, Austrochilidae, Austrochilinae) is described and illustrated based on specimens collected in Malleco Province, Chile.

**RESUMEN.** *Austrochilus forsteri*, nueva especie, (Araneae, Austrochilidae, Austrochilinae) es descrita e ilustrada sobre la base de especímenes colectados en la provincia de Malleco, Chile.

**Keywords:** Austrochilidae, *Austrochilus*, taxonomy, Chile

The Austrochilinae include two genera endemic to the Andean forests of central and southern Chile and adjacent Argentina. They comprise (along with the Hickmaniinae and Gradungulidae) the superfamily Austrochiloidea, sister group of Araneoclada (all araneomorph spiders other than Hypochilidae) (Forster et al. 1987).

During recent field work in Chile, two of us (LL and CG) observed austrochiline biology, mainly the combing and web-building behavior (Lopardo et al., unpub. data). When the material was determined, we found that the specimens from Monumento Natural Contulmo did not belong to any of the previously described species (Forster et al. 1987). In the present note we describe this new species, which seems to be close to *Austrochilus manni* Gertsch & Zapfe 1955, *A. melon* Platnick 1987, and *A. schlingeri* Platnick 1987 (see below). Behavioral and ecological data will be detailed elsewhere (Lopardo et al., unpub. data).

Specimens are deposited in the Museo Nacional de Historia Natural, Santiago, Chile (MHNS, Ariel Camousseight), Museo Argentino de Ciencias Naturales, Buenos Aires (MACN, Cristina L. Scioscia) and the American Museum of Natural History, New York (AMNH, Norman Platnick). The format of the descriptions and abbreviations follows Forster et al. (1987). The female genitalia were partially digested with KOH solution to dissolve the soft tissues and then observed with a compound microscope. Measurements are expressed in millimeters.

#### *Austrochilus forsteri* new species (Figs. 1–8)

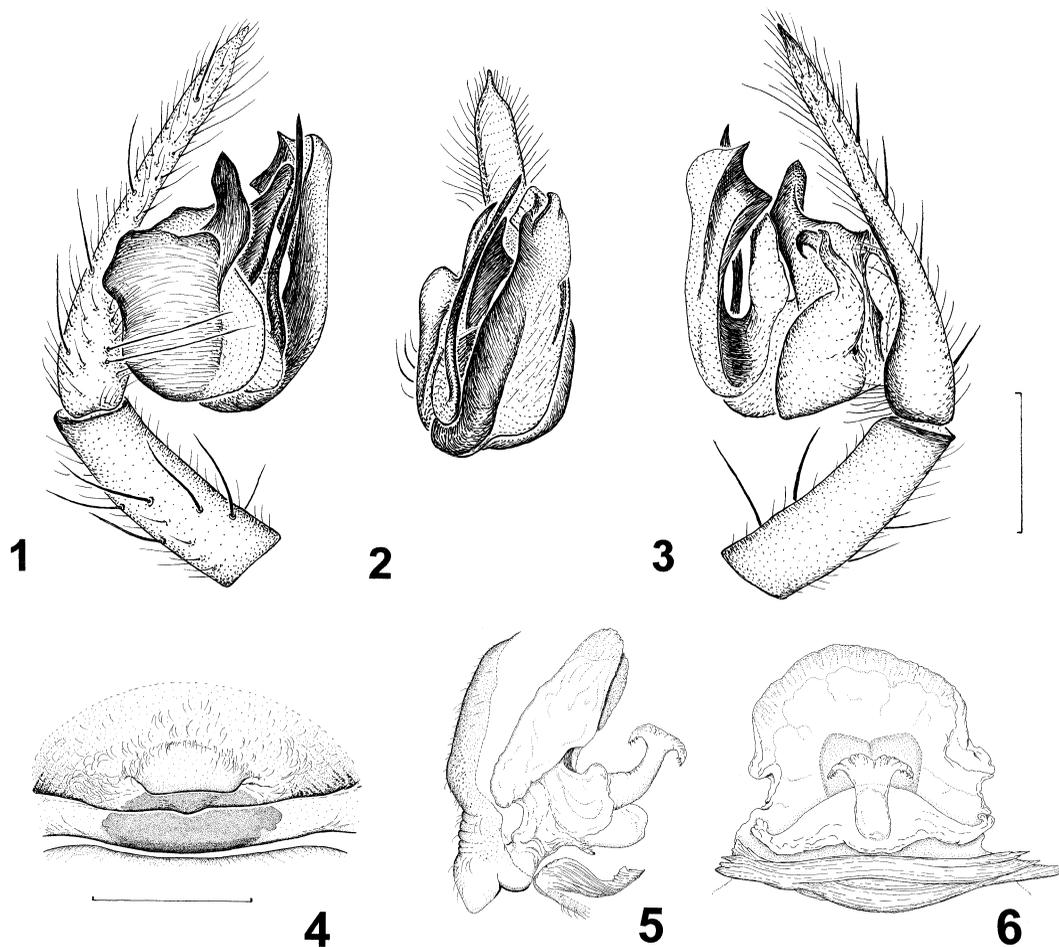
*Thaida peculiaris* (misidentification): Forster et al. 1987: 44 (records for Monumento Natural Contulmo only).

**Types.**—Male holotype and female paratype from Monumento Natural Contulmo, elev. 340 m, Malleco Province, Región IX (Araucanía), Chile (38°01'S, 73°11'W) 19–21 December 1998, M.J. Ramírez, L. Lopardo, L. Compagnucci, C.J. Grismado (MHNS).

**Note.**—The types were found together in the female's web, with some kleptoparasitic anapids (*Sofanapis antillanca* Platnick & Forster 1989). This interspecific relationship was reported recently (Ramírez & Platnick 1999).

**Etymology.**—The specific name is a patronym in honor of the late Dr. Raymond Forster, in recognition of his fundamental contributions to our knowledge of the spiders of the southern Hemisphere.

**Diagnosis.**—Males resemble those of *A. manni*, *A. melon* and *A. schlingeri* in having a sclerotized strip retrolaterally on the male palpal conductor (Fig. 3, Forster et al. 1987, figs. 126, 132, 138), but differ by the thin and sinuous embolus and by the shape of the tip of the conductor. Females resemble those of *A. franckei* Platnick 1987 in having the epigynum with a broad oval sclerotized plate (Fig.

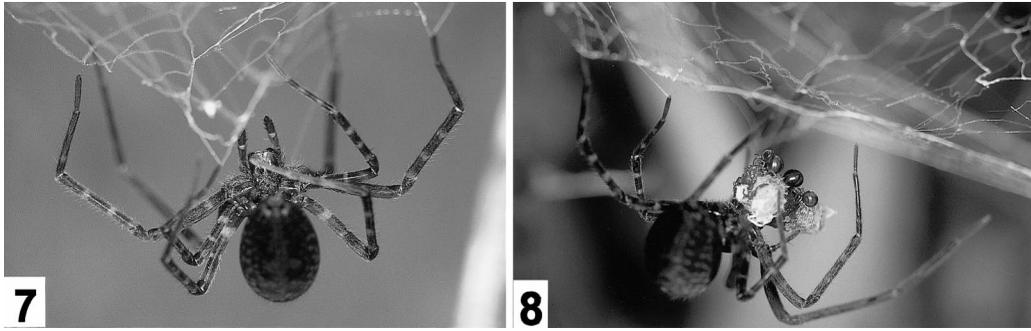


Figures 1–6.—*Austrochilus forsteri* new species: 1–3, left male palp; 1, prolateral; 2, ventral; 3, retro-lateral; 4–6, female epigynum; 4, ventral view; 5, cleared, lateral view; 6, cleared, dorsal view. Scale bars = 1 mm.

4) but differ in the shape of internal genitalic structures (Figs. 5, 6).

**Description.**—Male (holotype): Total length 10.76; carapace: 5.66 long, 3.88 wide; light brown, dusky ocular area, longitudinal midline dusky brown, sides lighter, with two yellowish paraxial bands. Design of dark lines from PME shaped like a posteriorly directed arrow. Clypeus at middle about 3.5 times AME diameter in height; eye diameters and interdistances: AME 0.20; ALE 0.32; PME 0.32; PLE 0.34; AME–AME 0.12; AME–ALE 0.12; PME–PME 0.10; PME–PLE 0.08; ALE–PLE 0.04; AME–PME 0.20; MOQ: 0.76 length, 0.60 front width, 0.84 back width; endites reddish brown except white anteromedian surfaces, labium dark brown except for white anterior margin, sternum uniform brown. Legs without distinct band pattern, all yellowish brown except tibiae, metatarsi and tarsi I–II, reddish brown. Leg formula: 1243;

measurements: length 1–4: femora: 9.94, 7.82, 6.19, 7.33; patellae: 1.95, 1.79, 1.46, 1.63; tibiae: 10.75, 6.84, 4.72, 6.19; metatarsi: 10.27, 7.49, 5.05, 6.52; tarsi: 3.42, 2.60, 2.12, 3.09; palp: femur length 2.58, patella length 0.89, tibia length 1.53, cymbium length 2.91. Spination (only surfaces bearing spines listed): femora: I d1–0–0, p2–3–2, r2–2–2; II d1–1–0, p1–2–3, r2–2–2; III, IVd1–1–1, p1–2–2, r2–2–2; patellae: III p0–1–0, r0–1–0; IV p0–1–0; tibiae: I d0–0–1, p2–3–2, v4–4–4, r2–2–2; II d0–1–0, p1–2–2, v4–4–2, r1–2–1; III d1–1–1, p1–1–1, v2–2–2, r0–1–2; IV d0–1–1, p2–2–3, v2–2–2, r2–2–2; metatarsi: I p1–2–0, v3–2–2, r1–1–0; II p1–2–1, v2–3–2, r1–1–2; III p1–2–1, v3–2–2, r2–1–2; IV p2–0–1, v1r–2–2, r1–0–2; palp: femur d0–0–1, p0–0–1, r0–0–1; patella d0–0–1; tibia d1–1–0, p1–1–0, v2–0–0. Abdomen purplish brown at dorsum and sides; venter with light spots in paramedian, longitudinal rows between book-



Figures 7–8.—*Austrochilus forsteri* new species, living specimens: 7, female; 8, female feeding on an insect with some kleptoparasites (*Sofanapis antillanca*). (Photographs: Martín J. Ramírez.)

lungs and tracheal patches. Palp (Figs. 1–3): large prolateral tegular apophysis; embolus thin and gently sinuous, apically ridged; terminal apophysis distally serrated; massive conductor with a retrolateral sclerotized tip.

Female (paratype): As in male, except as noted: total length 13.86; carapace: 6.30 long, 4.93 wide; clypeal height about 2.6 times AME diameter; eye diameters and interdistances: AME 0.30; ALE 0.40; PME 0.32; PLE 0.36; AME–AME 0.10; AME–ALE 0.14; PME–PME 0.34; PME–PLE 0.20; ALE–PLE 0.02; AME–PME 0.22; MOQ: 0.90 length, 0.62 front width, 0.78 back width; two dark, thin streaks extending back from PME to about half of pars cephalica. Legs yellowish brown with lighter bands on femora, patellae and tibiae (except tibiae I, uniformly reddish brown), metatarsi and tarsi uniformly reddish brown, III and IV slightly lighter. Leg formula: 1243; measurements: length 1–4: femora: 9.45, 7.66, 5.70, 7.17; patellae: 2.44, 2.44, 1.63, 1.95; tibiae: 9.78, 7.49, 4.56, 6.52; metatarsi: 8.31, 6.84, 5.21, 6.03 (calamistrum length 2.16); tarsi: 3.09, 2.28, 1.95, 2.60; Palp: femur length 3.07, patella length 1.05, tibia length 1.69, tarsus length 3.15. Spination: femora: I d1–0–1, p1–3–2, r2–3–1; II d1–1–1, p1–2–2, r2–3–1; III d1–1–1, p1–2–2, r2–1–2; IV d1–1–1, p1–2–1, r2–2–2; tibiae: I d0–1–0, p2–3–2, v4–4–2, r1–2–1; II d0–1–0, p1–1–2, v2–4–2, r1–2–1; III d1–1–1, p1–1–1, v3–2–2, r0–1–1; IV d1–1–1, p1–1–1, v2–2–2, r1–1–2; metatarsi: I p1–1–1, v2–4–2, r1–2–2; II p1–2–1, v4–2–2, r1–1–2; III p1–2–1, v3–2–2, r2–1–2; IV p2–1–1, v2–2–2, r2–1–2. Palp: femur d0–1–2, p0–0–1, r0–0–2; patella d0–0–1; tibia d1–1–0, p1–1–0; tarsus d1–1–0, p1–1–0, v4–0–2, r2–1–0. Female genitalia (Figs. 4–6): Wide and oval sclerotization behind the anterior knob; internally, anterior lobe with conspicuous pore plate; distal extension of median lobe with ragged borders; posterior receptaculum flattened and transversally folded.

**Material examined.**—Same data as the types: 1

♂ (MACN 9837); 1 ♀ (MACN 9838); 1 ♀ (MACN 9839) (MJR 19.XII.98/11, photo frames 27/30); 1 ♀, 4 juveniles (MACN 9845); 1 ♀, 2 juveniles (MHNS); 1 juvenile (MACN 9846); 1 juvenile (MACN 9844) (MJR 19.XII.98/7, photo frames 13/20); 1 juvenile (MACN 9842); 1 juvenile (MACN 9847) (MJR 19.XII.98/9, photo frame 26); 1 juvenile (MACN 9841); 1 subadult ♂ (MACN 9840); 1 juvenile (MACN 9843); 1 subadult ♀ (MHNS); 2 juveniles (MHNS); same locality, elev. 425 m, montane forest, 23 January 1985, N.I. Platnick & O.F. Francke, 1 ♀, 3 subadult ♂, 3 juveniles (AMNH).

**Distribution.**—Known only from the type locality.

#### ACKNOWLEDGMENTS

We wish to thank CONAF for authorization to work in Chilean protected areas; Don Ismael Matamala, the park keeper at Monumento Natural Contulmo, was especially helpful in the field; Mohammad U. Shadab inked the palp drawings; Mark S. Harvey, Martín J. Ramírez and two anonymous reviewers provided critical comments on a draft of the manuscript; MJR also took the photographs of living specimens that illustrate this paper. The field trip to Chile was supported by Sigma-Xi through a Grant-in-Aid to Lara Lopardo.

#### LITERATURE CITED

- Forster, R.R., N.I. Platnick, & M.R. Gray 1987. A review of the spider superfamilies Hypochiloidea and Austrochiloidea (Araneae, Araneomorphae). *Bulletin of the American Museum of Natural History* 185:1–116.
- Ramírez, M.J. & N.I. Platnick. 1999. On *Sofanapis antillanca* (Araneae, Anapidae) as a kleptoparasite of Austrochiline spiders (Araneae, Austrochilidae). *Journal of Arachnology* 27:547–549.

*Manuscript received 26 November 2001, revised 8 March 2002.*