

## A new species of *Therion* from the Sierras de Córdoba in northwest Argentina (Hymenoptera: Ichneumonidae: Anomalinae)

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**Abstract:** *Therion fidalgoi* n. sp. is described from the Sierras de Córdoba in the upland subtropical thorn scrub of northwest Argentina. It differs from other South American *Therion* because of its strongly elevated, bilobed ocellar area, bidentate mandible, and unpectinate tarsal claws.

**Resumen:** *Therion fidalgoi* n. sp. habita en el Chaco Serrano de las Sierras de Córdoba en el noroeste subtropical de la Argentina. Se diferencia de las otras especies sudamericanas de su género por tener el área ocelar del vértice muy elevada, abultada y bilobulada, la mandíbula con dos dientes apicales, y las uñas tarsales no pectinadas.

### Introduction

*Therion* has been known from a moderate number of species described from the Holarctic, northern Neotropic, Oriental, Ethiopian, and Australian Biogeographic Realms, but was first recorded from South America by Porter (1999), who described *T. wileyi* from the Bolivian puna and *T. ranti* from Argentina (Córdoba and Mendoza Provinces). I now describe a third new South American species from the Sierras de Córdoba in Argentina, where it is sympatric with *T. ranti*.

#### *Therion fidalgoi* Porter, new species

Figs. 1-2

**Description:** Female (Fig. 1). Color. Antenna light orange brown with black on most of first flagellomere above as well as on most of scape and pedicel; head black, clear yellow on clypeus, face, on lower 0.5 of frontal orbit and narrowly on about lower 0.5 of hind orbit as well as with a small blackish spot on each anterior tentorial pit and a larger blackish mark beneath each antennal socket, and with mandible dusky near base, yellow toward middle, and ferruginous grading apically into black on teeth; mesosoma black with yellow on tegula, axillary sclerites and all of scutellum; wings subtly tinged with brownish yellow, with venation dusky except brownish yellow on costa and pterostigma; gaster with tergites 1-4 mostly light brownish yellow, except for a broad black longitudinal stripe dorsally on basal 0.6 of 2nd tergite and an extensive area

ventro-laterally on 4th tergite, and with tergites 5-8 mostly shining black; fore and mid legs pale yellow to brownish yellow with coxae glossy black; hind leg with glossy black on coxa, trochanter black with apex briefly light brown, trochantellus glossy orange brown, femur glossy orange brown with black on apical 0.5, tibia somewhat more dully orange brown with black on apical 0.3, tarsus yellowish brown with blackish on apical 0.2 of 1st segment, on apical 0.6 of 2nd segment, on all but base and apex of segments 3 and 4, and more lightly infusate, brownish, on 5th segment. Head and mesosoma with long, dense silvery pubescence, especially conspicuous on sides of propodeum. Length of fore wing: 8.5 mm. Flagellum: short, 0.88 as long as fore wing, with 40 segments. Malar space 0.47 as long as basal width of mandible. Front: with coarsely reticulate sculpture. Face: 1.4 as wide as high, 1.2 as wide at level of antennal sockets as at level of anterior tentorial pits, so that inner orbits are gently, convergent ventrad. Stemmaticum: strongly raised, swollen, with a broad and deep median longitudinal sulcus so that in anterior view it appears divided into 2 lobes, lateral ocellus situated in an excavation on outer side of each lobe, very small, ocelo-ocular line: 3.2 as long as greatest diameter of lateral ocellus. Temple: 0.9 as long as eye in lateral view; in dorsal view weakly convex, not widened behind eyes; surface shining and with very coarse, dense, adjacent to reticulately confluent medium sized punctures. Clypeus: 1.9 as wide as long, almost flat in profile, with some very sparse large punctures. Mandible: elongate, tapering toward apex, with 2 prominent apical teeth of which

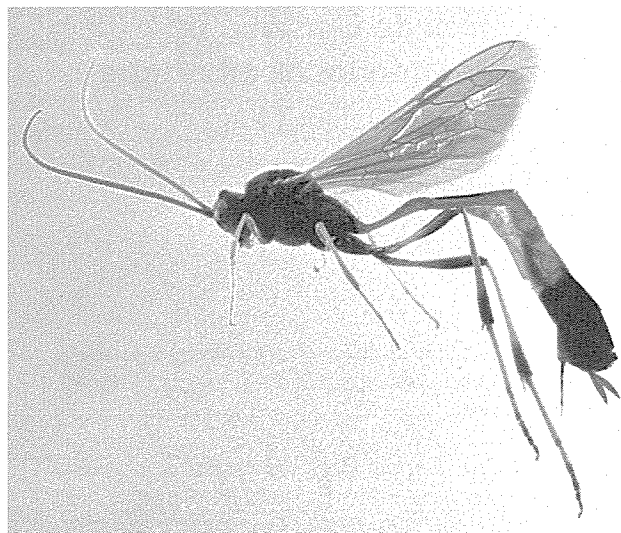


Figure 1. *Therion fidalgoi*, female, paratype, La Higuera, Argentina. Lateral view of entire insect.

the lower is only 0.4 as long as the upper. Mesoscutum: with notauli weak, traceable on about its basal 0.6; surface covered with large, dense, sharp, subadjacent to adjacent punctures. Prepectal carina: sharp on only about lower 0.3 of mesopleuron. Mesopleuron: with coarse adjacent to reticulately confluent punctures throughout except on speculum where the punctures are a little sparser, with distinct smooth and glossy interstices. Lower metapleuron: coarsely reticulo-punctate. Propodeum: coarsely reticulate. Radial cell: 4.3 as long as wide. Hind femur: 6.4 as long as deep. Second hind tarsomere: 4.2 as long as deep. Tarsal claws: not pectinate. First gastric tergite: with petiole 4.7 as long as wide at apex, postpetiole 1.3 as long as wide at apex. Second gastric tergite: 6.4 as long as wide at 1P apex. Ovipositor: sheathed portion 0.16 as long as fore wing.

**Variation.** The 4 paratypes are very similar to the holotype except for minor details of color and structure. Color: mandible sometimes mostly yellow, yellow band sometimes on as much as 0.7 of hind orbit and extending below into malar space, sometimes with a disjunct yellow orbital line at top of eye; pronotum sometimes yellowish on its lower front margin, sometimes with dull brownish yellow on front margin of mesepisternum, on mesepimeron, and weakly but extensively on mesosternum, hind trochanter sometimes largely orange brown with blackish toward base, darker staining on apical 0.5 of hind femur sometimes brownish rather than black, gastric tergites 1-4 in 1 specimen with dusky

staining partially obscuring the brownish yellow ground color. Length of fore wing 8.0-9.0 mm. Flagellum with 43-44 segments. Malar space: 0.40-0.45 as long as basal width of mandible. Ocellular line 2.7-3.3 as long as greatest diameter of latera ocellus. Temple 0.8-0.9 as long as eye in lateral view. Radial cell: 4.5-4.9 as long as wide. Hind femur: 6.2-6.5 as long as deep. Second hind tarsomere 4.4-4.8 as long as deep. First gastric tergite: with petiole 4.4-4.7 as long as wide at apex, postpetiole 1.2-1.3 as long as wide at apex. Second gastric tergite: 5.8-6.5 as long as wide at apex. Ovipositor: 0.19 as long as fore wing.

**Type material.** Holotype, female, ARGENTINA, Sierras de Córdoba, Dolores nr. La Cumbre, Chaco Scrub, 1000 m, 18-28-IV-2000, P. Fidalgo & C. Porter. Paratypes, 4 females. ARGENTINA, Sierras de Córdoba, La Higuera, tall weeds at roadside, 14-IV-2000, P. Fidalgo, C. Porter. Holotype in IML, 1 paratype in IML, 2 paratypes in FSCA, 1 paratype in PORTER.

**Relationships.** Only 2 other *Therion* have been described from South America (Porter 1999), *T. wileyi* Porter from high Andean steppe (puna) in Bolivia and *T. ranti* Porter, which occurs in Argentina with records from the Sierras de Córdoba and from the Andean foothills of Mendoza Province.

The following key summarizes the most important diagnostic features which separate these 3 species.

1. Stemmaticum strongly raised, swollen, with a deep median longitudinal sulcus so that in front view it appears to be divided into 2 lobes (Fig.

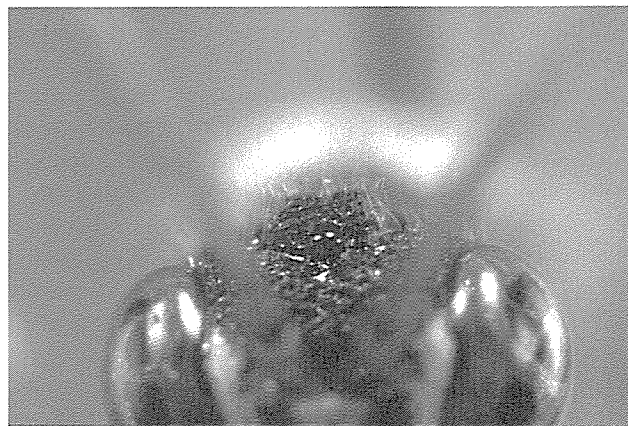


Figure 2. *Therion fidalgoi*, female, paratype, La Higuera, Argentina. Anterior view of head, showing strongly raised and bilobed ocellar area (stematicum).

- 2); temple with coarse and dense adjacent to reticulately confluent punctures; mandible with 2 conspicuous apical teeth, of which the lower is 0.4 as long as the upper; mesopleuron with coarse, adjacent to reticulate punctation; tarsal claws not pectinate; mesosoma black with scutellum bright yellow; wings faintly tinged with brownish yellow ..... *Therion fidalgoi* n.sp.
- 1'. Stemmaticum scarcely raised above surrounding surface of vertex, neither bilobate nor sulcate; temple strongly but in large part not confluent-punctate; mandible unidentate (lower tooth either absent or hidden); mesopleuron extensively smooth and polished with some punctures and wrinkles but never completely sculptured; tarsal claws conspicuously pectinate on basal 0.8; mesosoma red or red and black, scutellum never yellow; wings conspicuously infuscate ..... 2
2. Mesosoma mostly pale red; apex of prestigma and base of pterostigma bright yellow; clypeus in lateral view with its basal 0.5 notably elevated; notauli impressed on basal 0.6 of mesoscutum ..... *Therion ranti* Porter
- 2'. Mesosoma red with extensive black areas; apex of prestigma and base of pterostigma dull whitish; clypeus in profile weakly convex, scarcely elevated toward base; notauli faintly impressed on basal 0.3 of mesoscutum ..... *Therion wileyi* Porter

The strongly swollen and bilobed stemmaticum seems to be an autapomorphy of *T. fidalgoi*. Otherwise, this species is a much more "normal" *Therion* than *T. ranti* and *T. wileyi* because of its bidentate mandible and toothless tarsal claws, features shared with most of the North American species (Dasch 1984).

**Habitat notes.** The type specimens were collected in full sunlight as they flew rather close to the ground at the roadside among tall grass and weeds, including *Senecio* sp. (Compositae). Both collecting localities are in semiarid subtropical thorn scrub which belongs to the upland or Chaco Serrano Province of the Chaco Biogeographic Realm as defined by Cabrera and Willink (1973). Some genera of plants that characterize this biome are: *Schinus* (Anacardiaceae); *Opuntia* (Cactaceae); *Baccharis* (Compositae); *Acacia*, *Cercidium*, *Geofroea*, and *Prosopis* (Leguminosae); *Trithrinax* (Palmae); *Condalia* and *Zizyphus* (Rhamnaceae); *Bumelia* (Sapotaceae); and *Celtis* (Ulmaceae).

**Specific name.** For my friend and colleague, Dr. Patricio A. Fidalgo, in recognition of his generous contributions to my work in Argentina and of his distinguished research on the mymarid Chalcidoidea.

## Collections

- FSCA.** Florida State Collection of Arthropods, Florida Department of Agriculture and Consumer Services, Division of Plant Industry, P.O. Box 147100, Gainesville, Florida 32614-7100.
- IML.** Fundación e Instituto Miguel Lillo, Miguel Lillo 251, 4000 San Miguel de Tucumán, Argentina.
- PORTER.** Collection of Charles C. Porter, currently housed at the Florida State Collection of Arthropods.

## Acknowledgments

Dr. Patricio Fidalgo of the Instituto Superior de Entomología, at the Facultad de Ciencias Naturales of the Universidad Nacional de Tucumán (Argentina) arranged the field trip during which *T. fidalgoi* was taken and personally collected part of the type series. I am also grateful to Drs. Lionel Stange and Mike Thomas of the FSCA who assisted the author in this research.

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