

THE FIRST RECORD OF *NEMATUS* PANZER FROM SOUTH AMERICA:
A NEW SPECIES FROM ARGENTINA
(HYMENOPTERA: TENTHREDINIDAE)

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Abstract.—*Nematus desantisi*, n. sp., is described. Specimens were taken from *Salix humboldtiana* in Chubut, Argentina. This is the first South American record for the genus *Nematus*.

The species described below represents the first record of the genus *Nematus* and only the third species of the subfamily Nematinae in South America. The other Nematinae are *Pristiphora brasiliensis* Malaise (1942) and *P. plaumanni* Wong (Wong and Benson, 1965), both from Santa Catarina, Brazil. Wong (1976) also described *P. mexicana* from Oaxaca, Mexico, and gave a key to the three species of *Pristiphora* south of the United States.

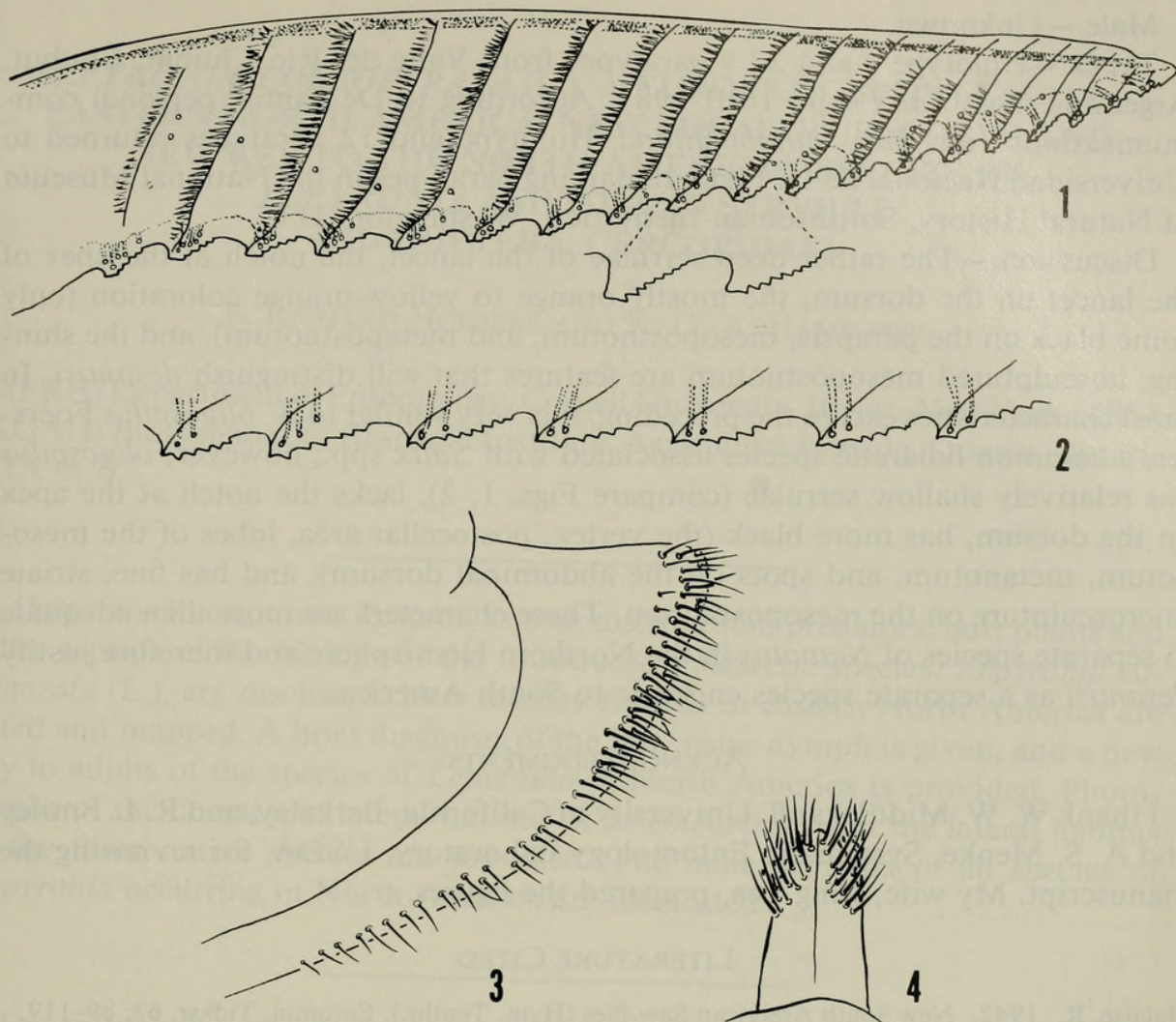
The Nematinae are abundant in the Northern Hemisphere, where they are the dominant sawfly group in the boreal and arctic regions. Only a few species are found in the Southern United States and extreme northern Mexico. The usual hosts for many Nematinae, including *Nematus*, are *Salix* spp. and *Populus* spp. It was therefore surprising, but not entirely unexpected, to discover a species of *Nematus* from Chubut, Argentina, taken from *Salix humboldtiana* Willdn. Though there is the possibility that it is an introduced species, several characteristics separate it from related species in the Northern Hemisphere. These warrant its treatment as a new species and most probably a species endemic to Argentina.

Specimens were sent to me by Ing. Agr. Dr. Luis De Santis, Facultad de Ciencias Naturales y Museo, Universidad Nacional de La Plata, La Plata, Argentina, for whom the species is named.

Nematus desantisi Smith, NEW SPECIES

Figs. 1, 3, 4

Female.—Length, 5.2–7.0 mm. Antenna black, undersurface of scape and flagellum brown to reddish brown. Head and body generally orange to pale yellow (probably green when alive), with following darker orange: dorsum of head, mesonotum, metanotum, dorsum of abdomen, tibiae, tarsi, and sheath; following pale yellowish: mouthparts, area below antennae, inner orbits narrowly, pronotum, tegula, thorax laterally and ventrally, abdomen laterally and ventrally, coxae, trochanters, and femora; and following black: mesopostnotum, except laterally, metapostnotum, except laterally, small spot on or most of parapsis, and apical margin of sheath. Wings hyaline; costa and stigma yellow or orange yellow (probably green when alive), remaining veins brownish.



Figs. 1–4. Figs. 1, 3–4. *Nematus desantisi*. Fig. 2. *N. oligospilus*. 1, Lancet, with enlargement of two serrulae. 2, Enlargement of central serrulae. 3, Sheath, lateral view. 4, Sheath, dorsal view.

Antennal length $3\times$ head width; 1st segment as long as broad; 2nd segment broader than long; 3rd segment slightly shorter than 4th segment; segments 4–9 gradually decreasing in length. Clypeus circularly emarginated at center for about $\frac{1}{3}$ its medial length, with rounded lateral lobes; malar space about $1\frac{1}{3}\times$ diameter of an ocellus and slightly more than distance between antennae; postocellar area $2\times$ broader than long, rounded behind; ratio of distances between hindocellus and eye, between hindocelli, and between hindocellus and posterior margin of head: 1.4:1.4:1.2; inner margins of eyes subparallel, slightly diverging below, lower interocular distance slightly more than upper interocular distance, lower interocular distance $1\frac{2}{3}\times$ eye length. Head and thorax shining, without microsculpture; abdomen with fine reticulate microsculpture. Hindbasitarsus equal in length to 3 following tarsal segments combined. Sheath (Figs. 3, 4) straight to slightly concave above, rounded below in lateral view; in dorsal view broad at base and tapering to rounded apex with hairs short and straight, not curved inward. Lancet (Fig. 1) with about 20 serrulae; serrulae relatively deep, each truncated at apex, without anterior teeth, and with about 7–9 coarse posterior subbasal teeth; segments curved posteriorly toward dorsal margin, apical 5 or 6 segments without hairs or with hairs only on ventral portion; segmental hairs not dense, not overlapping each other; small notch at apex on dorsum.

Male.—Unknown.

Types.—Holotype ♀ and 22 ♀ paratypes from Valle del Rio Chubut, Chubut, Argentina, host *Salix* spp., 16-II-1981. According to De Santis (personal communication) from *Salix humboldtiana*. Holotype and 12 paratypes returned to Universidad Nacional de La Plata, remaining paratypes in the National Museum of Natural History, Smithsonian Institution, Washington, D.C.

Discussion.—The rather deep serrulae of the lancet, the notch at the apex of the lancet on the dorsum, the mostly orange to yellow-orange coloration (only some black on the parapsis, mesopostnotum, and metapostnotum), and the shining, unsculptured mesopostnotum are features that will distinguish *desantisi*. In most characteristics except the preceding, it is very similar to *N. oligospilus* Foerster, a common holarctic species associated with *Salix* spp.; however, *oligospilus* has relatively shallow serrulae (compare Figs. 1, 2), lacks the notch at the apex on the dorsum, has more black (the vertex, postocellar area, lobes of the mesonotum, metanotum, and spots on the abdominal dorsum), and has fine, striate microsculpture on the mesopostnotum. These characters are more than adequate to separate species of *Nematus* in the Northern Hemisphere and therefore justify *desantisi* as a separate species endemic to South America.

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LITERATURE CITED

- Malaise, R. 1942. New South American Saw-flies (Hym. Tenth.). Entomol. Tidksr. 63: 89–119.
 Wong, H. R. 1976. American species of *Pristiphora* south of the United States. Ann. Entomol. Soc. Am. 69: 525–526.
 Wong, H. R. and R. B. Benson. 1965. A new species of *Pristiphora* from Brazil (Tenthredinidae: Hymenoptera). Can. Entomol. 97: 779–782.



Smith, D R. 1983. "The 1St Record Of Nematus Panzer From South america - A New Species From Argentina (Hymenoptera, Tenthredinidae)." *Proceedings of the Entomological Society of Washington* 85, 260–262.

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