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Description of a new species of Orsillini (Hemiptera: Heteroptera: Lygaeidae: Orsillinae) from Argentina, with a key to the Argentinean Orsillini

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Abstract

Aborsillus pora, the second species in the genus *Aborsillus*, is described and illustrated, the generic limits are discussed, new records to Argentinean Orsillini are provided, and a key to the Argentinean Orsillini as well as a distributional map for these species is given.

Key words: *Aborsillus pora* **n. sp.**, Orsillinae, *Neortholomus*

Introduction

The tribe Orsillini (Lygaeidae: Orsillinae) is distributed worldwide. Three of its genera are restricted to the New World, *Belonochilus* Uhler, 1871 from the Nearctic Region and *Aborsillus* Barber, 1954 and *Neortholomus* Hamilton, 1983 from the Neotropics. *Aborsillus* was described for only one species, *A. insignis* Barber, 1954 from Brazil (Minas Gerais); and *Neortholomus* was erected by Hamilton to include one species described by him and eight species from the New World previously placed in the genus *Ortholomus* Stål, 1872; three of these species are known from Argentina.

The genus *Aborsillus* can be recognized by the combination of the following characters: head short with anteocular length less than twice the length of eye, profemur with spines, and the mesopleuron overlapping the propleuron. Only three genera of Orsillinae, all placed in Orsillini, have the profemur spined: *Orsillus* Dallas, 1852 with three or more spines, *Belonochilus* with a single spine (although sometimes lacking), and *Aborsillus* with one or two spines. Among the American Orsillini the only other genus that has the mesopleuron overlapping the propleuron is *Belonochilus*.

Most of the material studied for the present contribution comes from the Provincial Park Moconá (Parque Provincial Moconá), located in the Departamento San Pedro (Misiones, Argentina), which includes the National Natural Monument of Moconá Falls. This park occupies 999 ha of the *Reserva de la Biósfera Yabotí* and preserves the falls and the surrounding Paranaense forest. In the last two years the authors have performed several field trips and studies concerning the biodiversity of terrestrial true bugs from this area, considered the most diverse of Argentina.

In this contribution the second species in the genus *Aborsillus* is described and illustrated, and the generic limits are discussed and reconsidered. New records for Argentinean Orsillini are also provided, as well as a key to the Argentinean Orsillini and a distributional map for these species. The material examined belongs to the Museo de La Plata, Argentina (MLP). All the measurements are given in millimeters.

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Systematics

***Aborsillus pora* sp. nov.**
(Figs 1–8)

Holotype. Male, Argentina, Misiones, Parque Prov. Moconá, S 27° 09.185" W 53° 54.080", 342 m, 2-X-2010, Montemayor col. (MLP).

Paratype. female, same data (MLP).

Diagnosis. Rostrum long, reaching abdomen; hemelytra with a medial transverse dark band; scutellum darker than head and pronotum.

Description. Male holotype (Fig. 1): Total length 3.75. Head length 0.55. Head width 0.77. Scape 0.16, pedicel 0.28, basiflagellomere 0.32, distiflagellomere 0.43. Pronotal length 0.75, pronotal width 1.17. Rostral length: I 0.44, II 0.40, III 0.42, IV 0.31.

Antenna with short semierect silvery setae: scape, pedicelle, and basiflagellomere light brown, base of pedicelle and basiflagellomere dark brown; distiflagellomere dark brown. Head, pronotum, scutellum, hemelytron and pleura with short, adpressed, silvery setae. Head and anterior half of pronotum brown; posterior half of pronotum light brown; base of head, collar region, a longitudinal median stripe, humeral angles and scutellum dark brown almost black. Buccula light brown. Rostrum with scattered, short, semierect silvery setae, dark brown. Hemelytron (Fig. 1) whitish, base and outer margins yellowish; clavus distally dark brown; corium with a medial transverse dark brown band and a dark reddish maculae distally; membrane hyaline. Pleura brown, acetabular areas, ostiolar peritreme and metaepimeron dorsally whitish. Legs with short decumbent silvery setae, light brown, pretarsus darker. Abdomen with abundant very short, adpressed, silvery setae with longer semierect setae ventrally; brown, pygophore lighter, connexiva black and white.

Head, pronotum, scutellum, and pleura coarsely punctuated.

Evaporative area large, occupying almost all of metapleuron except a narrow dorsal area, a large part of mesopleuron reaching its antero-dorsal margin, and medially all the thoracic sterna (Fig. 3).

Pygophore as in figures 4a, b and 5. Parameres as in figures 6a, b, with many erect setae on shank extended basally on curved blade. Aedeagus as in figure 7.

Female. (Figs 2, 3) Total length 3.90. Head length 0.70. Head width 0.83. Scape 0.17, pedicel 0.35, basiflagellomere 0.37, distiflagellomere 0.58. Pronotal length 0.83, pronotal width 1.33. Rostral length: I 0.45, II 0.37, III 0.42, IV 0.33.

Similar to male but larger and with darker femora. Pregenital abdominal sterna with a median sulcus.

Etimology. The specific epithet refers to the Guarani word *porâ*, meaning "cute, beautiful."

Distribution. Argentina.

Discussion. The characters most valuable to distinguish *A. pora* from *A. insignis* are the length of the rostrum and the coloration pattern. In *A. insignis* the rostrum is shorter, never reaching the abdomen, the scutellum is concolorous with the pronotum and the head, and the hemelytra lack a medial transverse dark brown band.

Comments about the generic limits

There are some characters mentioned by Barber (1954) and Ashlock (1967) that should be reconsidered in order to include *A. pora* in the genus. These characters are: the length of the rostrum, the number of spines on the profemur, and the presence of a carina on the head.

Both authors mentioned a short rostrum "just passing the middle coxae." *A. pora* has a rostrum much longer, which reaches the abdomen. In the generic description, Barber mentioned only one apical spine on the fore femora; Ashlock in the redescription also mentioned one single spine, but when he discussed classification and character analysis he said that some specimens may have a second small apical spine. In the only two known specimens of *A. pora* the profemora have two spines. Ashlock mentioned the presence of a carina extending from before each ocellus paralleling the eye to the base of the antenniferous tubercle; this character is not mentioned by Barber in the original description, and the specimens of *A. pora* lack a carina. We examined photographs of the holotype and some paratypes of *A. insignis* and we were not able to determine if this carina is present or not.

Following the generic key to the Orsillini of the world (Ashlock 1967), *Aborsillus* is recognized from *Belonochilus* Uhler in couplet five by the presence of the previously mentioned carina and by the head length; this last character is the best to discriminate both genera.

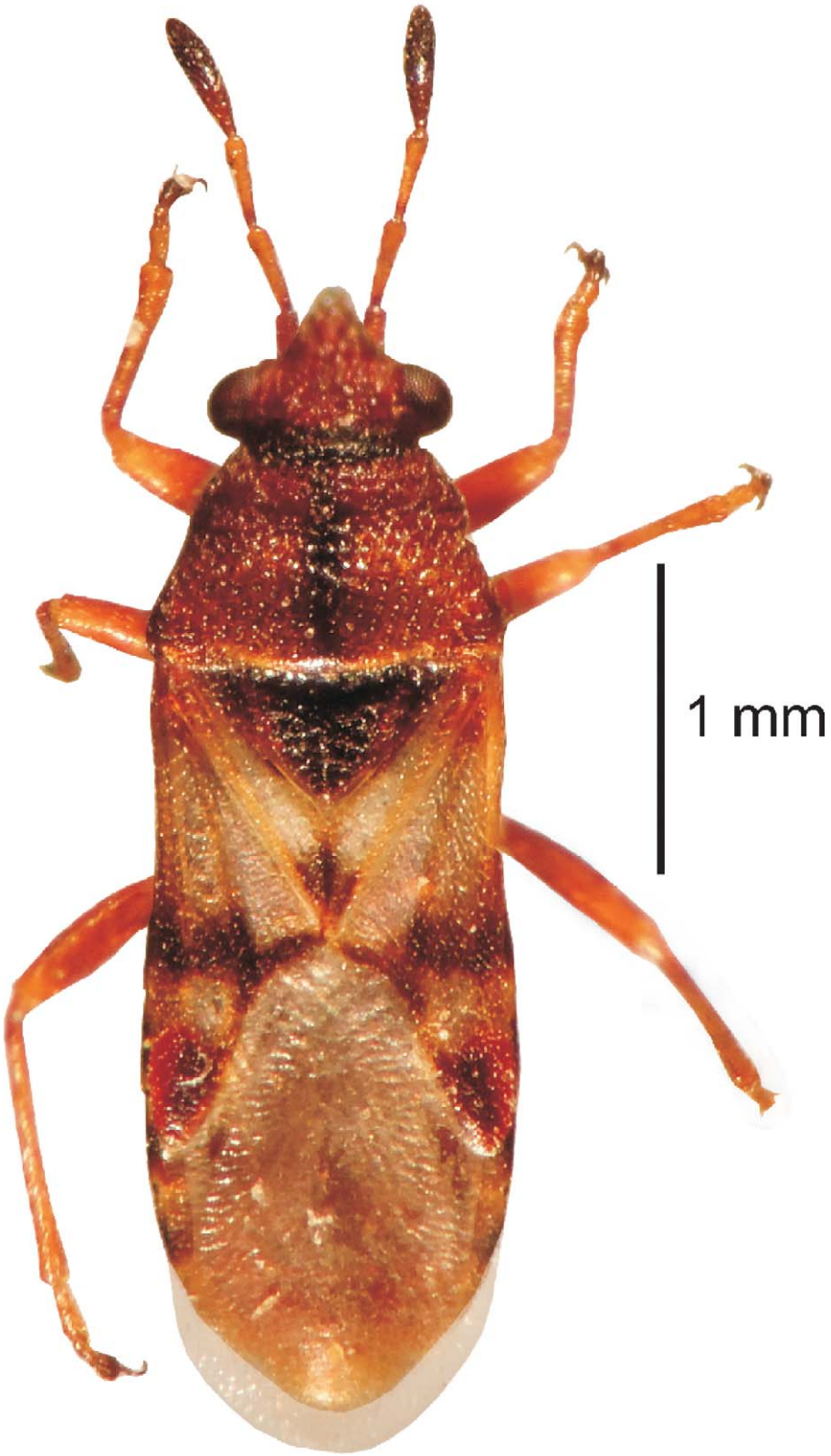


FIGURE 1. *Aborsillus pora* **sp. n.**, dorsal view.

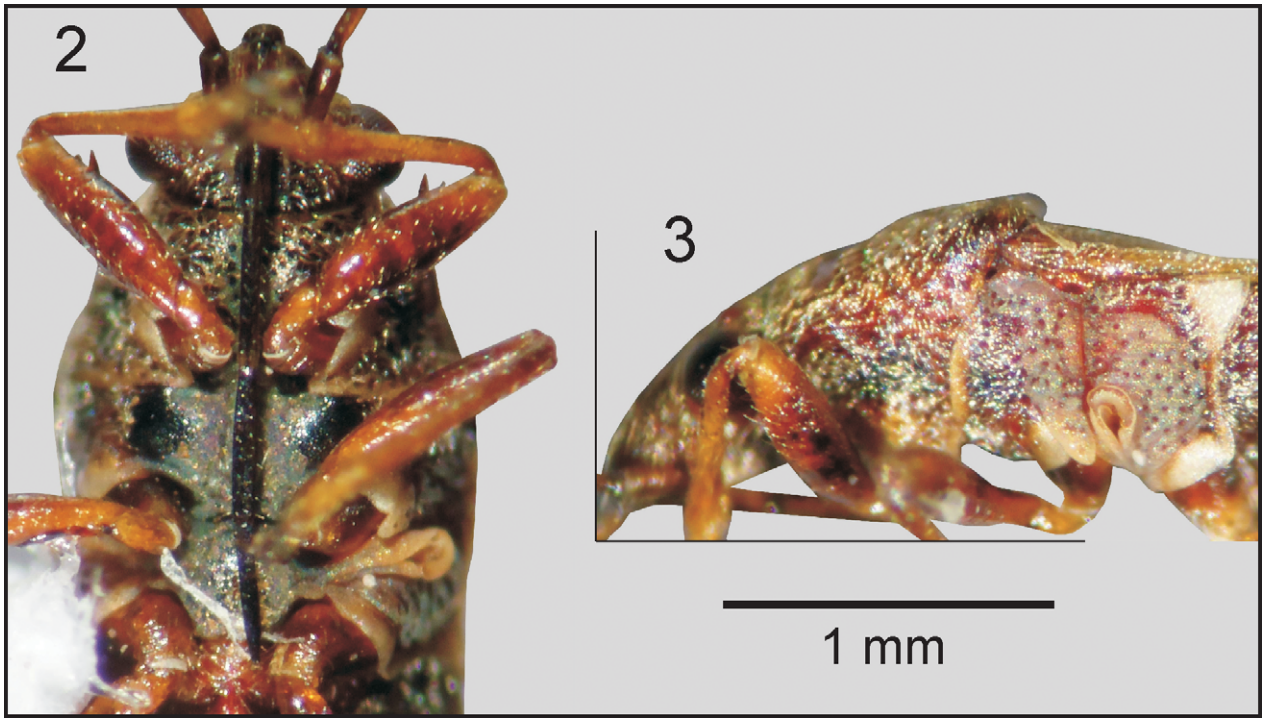


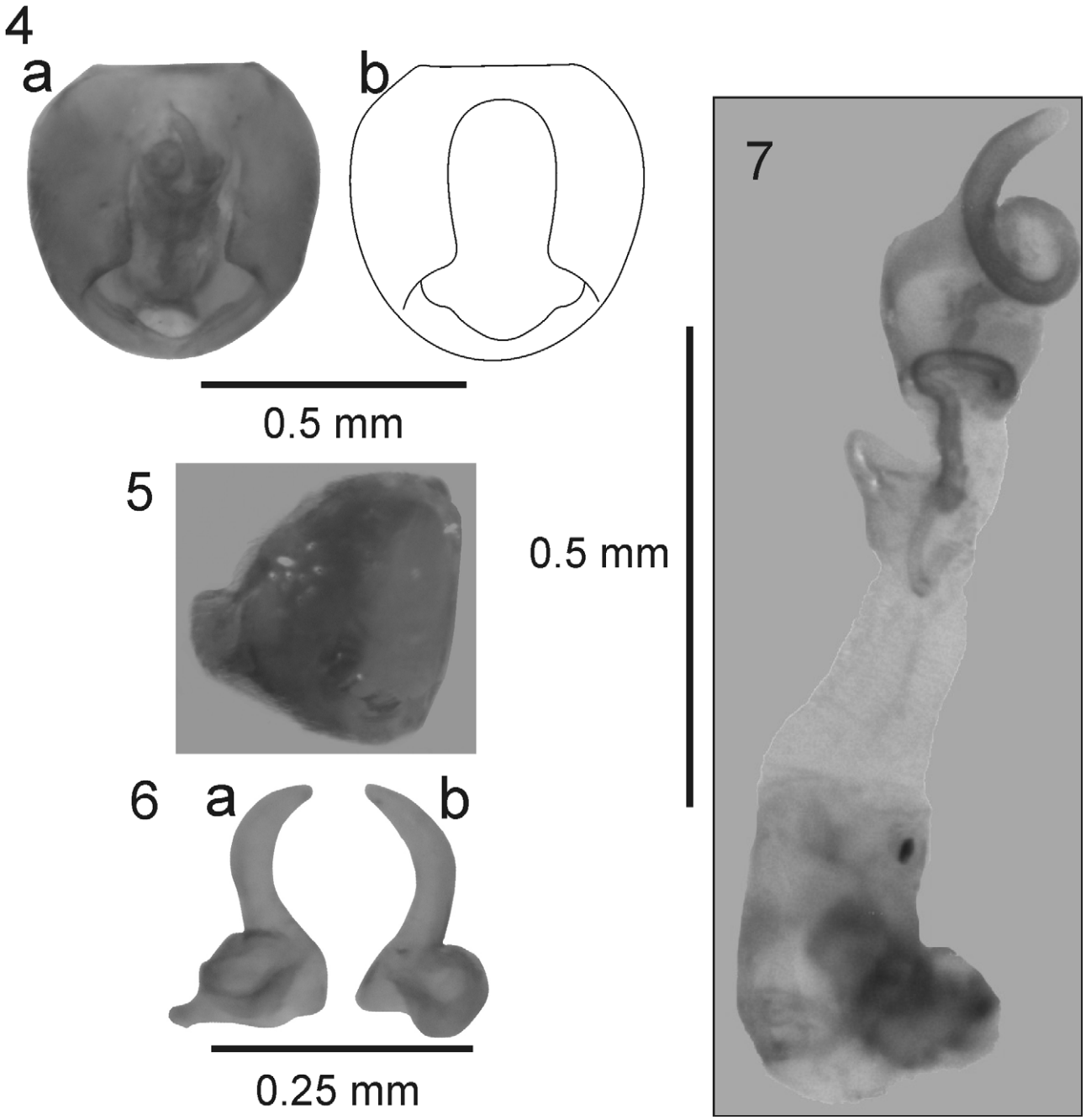
FIGURE 2, 3. *Aborsillus pora* **sp. n.** (2) head and thorax, ventral view. (3) thoracic pleura.

Key to the Argentinean orsillini (Fig. 8)

1	Mesopleuron overlapping with propleuron; forefemur armed with spines	*Aborsillus pora* **n.sp.**
-	Mesopleuron and propleuron not overlapping; forefemur unarmed	2
2	Scutellum swollen, in lateral view slightly higher than pronotum	*Neortholomus gibbifer* (Berg, 1892)
-	Scutellum not swollen, in lateral view not higher than pronotum	3
3	Rostrum very long, clearly surpassing third abdominal segment; third labial segment very long	*Neortholomus rubricatus* (Berg, 1878)
-	Rostrum shorter, reaching metacoxae or, at most, reaching second abdominal segment; third labial segment relatively shorter	*Neortholomus jamaicensis* (Dallas, 1852)

Discussion

Among the Argentinean *Neortholomus* (Fig. 8) there are two species very difficult to distinguish; these are *N. rubricatus* and *N. jamaicensis*. Both species greatly vary in size and coloration pattern. According to Hamilton (1983) the most useful character to distinguish them is the length of the rostrum and, in particular, the length of the third rostral segment. In *N. rubricatus* the rostrum reaches the second abdominal segment and the third rostral segment is longer than anteocellar head length; in *N. jamaicensis*, the rostrum reaches the metacoxae and the third rostral segment is shorter than the anteocellar head length. The main problem lies in specimens that appear either to be ambiguous for crucial characters, among them the rostral length, or to have intermediate characters (Hamilton 1983). Moreover, the genitalia of both species seem to be very similar and do not provide any conclusive evidence. In order to bring some light to this dilemma more evidence is needed to determine the identity of these specimens.



FIGURES 4–7. *Aborsillus pora* **sp. n.** (4) pygophore: a, dorsal view; b, scheme. (5) pygophore, lateral view. (6), right paramere: a, inner view; b, outer view. (7) aedeagus.

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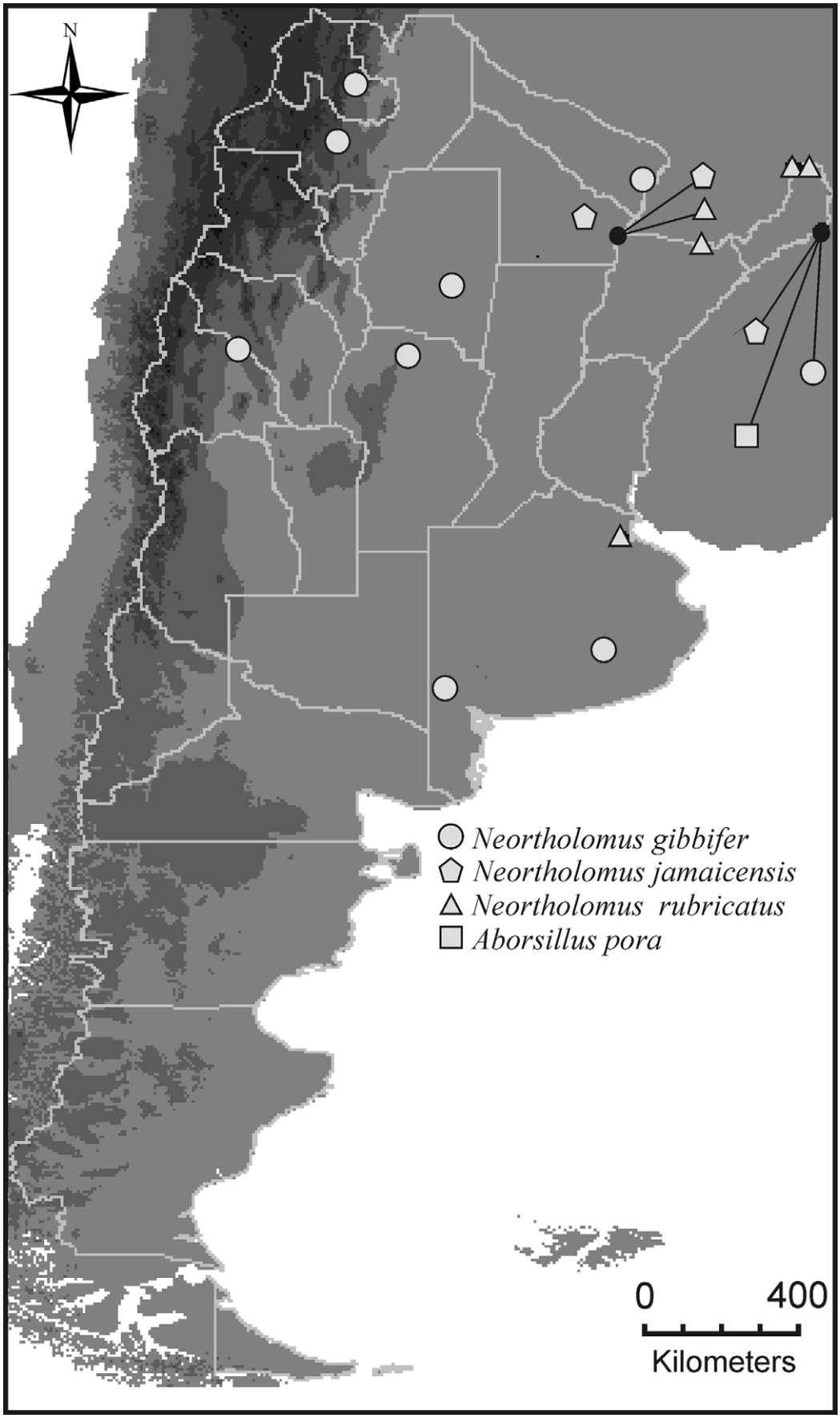

FIGURE 8. Geographic distribution of Argentinean Orsillini.

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