

## A new species of the genus *Prionomastix* Mayr, 1876 (Hymenoptera: Encyrtidae) from Ecuador

## Новый вид энциртид рода *Prionomastix* Майр, 1876 (Hymenoptera: Encyrtidae) из Эквадора

V.A. Trjapitzin\*, S.N. Myartseva\*\*  
В.А. Тряпицын\*, С.Н. Мярцева\*\*

\* Zoological Institute, Russian Academy of Sciences, Universitetskaya nab. 1, St. Petersburg 199034 Russia.

\* Зоологический Институт РАН, Университетская наб. 1, Санкт-Петербург, 199034, Россия.

\*\* Centro de Investigación, U.A.M. Agronomía y Ciencias, Universidad Autónoma de Tamaulipas, Cd. Victoria, Tam. 87149 México.

KEY WORDS: Hymenoptera, Encyrtidae, *Prionomastix sorokinae* sp.n., taxonomy, Ecuador.

КЛЮЧЕВЫЕ СЛОВА: Hymenoptera, Encyrtidae, *Prionomastix sorokinae* sp.n., таксономия, Эквадор.

ABSTRACT: *Prionomastix sorokinae* sp.n., is described from Ecuador. The new species is compared with *P. montana* Prinsloo, 1986 from the Republic of South Africa.

РЕЗЮМЕ: В статье описан *Prionomastix sorokinae* sp.n., из Эквадора. Новый вид сравнивается с *P. montana* Prinsloo, 1986 из Южно-Африканской Республики.

### Introduction

The genus *Prionomastix* Mayr, 1876 belongs to the tribe Prionomasticini of the subfamily Encyrtinae. Eleven species of *Prionomastix* were previously described: Six members of the genus are known only from Afrotropical region, three from Neotropical, one from Nearctic and another one from Palaearctic regions. Species with known hosts are parasitoids of nymphs of Auchenorrhyncha (Homoptera) of the families Membracidae and Cicadellidae. Revisions of the genus *Prionomastix* have been published by Hoffer [1957], Annecke [1962], Gordh & Trjapitzin [1981], Trjapitzin [1989] and Trjapitzin & Ruíz Cancino [1998]. The latter paper contains the most updated key to females of 11 species of *Prionomastix* of the world fauna.

Head of females of *Prionomastix* species are characterized by very wide frontovertex, acute occipital margin, high position of antennal toruli, non-enlarged antennae, mandibles having one tooth and broad truncation supplied with minute denticles. Antennal funicles of males with numerous longitudinal sensilla.

The species, described below, was obtained for identification from Dr. Serguei V. Triapitsyn, the UCR Entomological Collection, Department of Entomology, University of California, Riverside, California, USA. It appeared to be dissimilar to Neotropic species, e.g., *Prionomastix fasciatipennis* (Girault, 1913) from Mexico, Brazil, Paraguay and Argentina; *P. nikolskayae* Trjapitzin, 1989 from Costa Rica; and *P.*

*pulawskii* Trjapitzin et Ruíz Cancino, 1998, from Mexico. The new species is more closely related to *P. montana* Prinsloo, 1989 from Republic of South Africa.

*Prionomastix sorokinae* Trjapitzin et Myartseva, sp.n.  
Fig. 1.

Type material, Holotype ♀, labelled: "Mera, Ecuador, Jan. 26 – Feb. 2, 1923 (F.X. Williams, collector)." Antenna, anterior wing and posterior wing are on the microscopic slide No 2001 R. The holotype is in the collection of the National Museum of Natural History, Washington, D.C., USA.

DESCRIPTION. Female (holotype). Minimum width of frontovertex is 0.5 of maximum head width, only a little longer than wide (7:6). Apical angle of ocellar triangle is somewhat more than 90°; distance between posterior ocelli more than distances from them to margins of eyes (5:3) and to occipital margin (15:4-5). Antennal toruli immediately above the inferior level of eyes, which are situated very closely to each other: distance between toruli two times less than width of torulus; distance from torulus to eye margin less than that to oral margin (11:16). Antenna is shown on Fig. 1. Mouth with very concave superior margin, its width more about three times less than maximum head width (2:6.5). Mesoscutum approximately twice wider than long. Scutellum not convex, as long as mesoscutum. Anterior wing about 2.8 times as long as its greatest width. Marginal vein about 2 times as long as wide; stigmal vein slightly curved, narrowed at base and somewhat enlarged at the rounded apex; postmarginal vein somewhat longer than stigmal one (13:10.5). Costal cell 8.5 times as long as wide. Midtibial spur a little shorter than middle basitarsus (10:13). First segment of posterior tarsi 5 times as long as wide. Gaster (metasoma without petiole) shorter than mesosoma (thorax plus propodeum) (2:3).

Frontovertex blackish-brown. Face brownish-yellow. Malar spaces blackish-brown, but less intensively than frontovertex. Scrobal depression dark, as well as the ridge between toruli (except its lower part). Antennal radicle brownish-yellow; scape brownish-yellow, somewhat infuscate; pedicel blackish-brown, dorsally black; funicle and clava black. Mandible and palpi yellow. Pronotum black with bronze-violet shine; mesoscutum of the same colour, brownish-yellow laterally and along hind margin. Axillae brown,

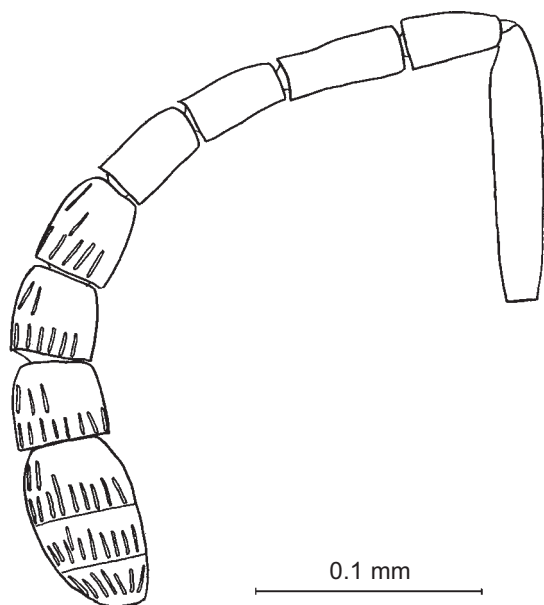


Fig. 1. *Prionomastix sorokinae* sp. n., ♀, antenna. Orig. drawing by S.N. Myartseva.

Рис. 1. *Prionomastix sorokinae* sp. n., ♀, усик. Ориг. рис. С.Н. Мярцевой.

black in the middle. Tegulae completely black. Scutellum and mesopleura black with rather strong violet shine. The basal part (0.4) of the anterior wing hyaline, its submarginal vein more or less clear; the middle part of the wing with transverse dark band near marginal, stigmal and submarginal veins, extending to the posterior margin of wing, where it is wider; the width of this band before the clear break is about 0.25 wing

length; the rest of wing hyaline, only weakly infumated. Fore and mid coxae, fore and mid femora and fore tibiae more or less yellow or brownish-yellow; spur of the fore tibia black; mid tibia brown-black, except more or less brown apex; midtibial spur dark yellowish-brown; hind femur and tibia (including two tibial spurs) black; fore tarsi blackish-brown; first segment of mid tarsi blackish-brown, the rest ones black; hind tarsi black.

Frontovertex with rather deep reticulate (mostly pentagonal), sculpture and scarce minute punctures. Mesoscutum with a similar, but more shallow sculpture with greater cells; piliferous punctures are well pronounced. Tegulae with strong reticulate sculpture, axillae reticulate. Scutellum with minute cells. Mesopleura with elongate and shallow reticulate sculpture, almost smooth apically. Propodeum dorsally with very shallow reticulate sculpture, the sculpture is pronounced laterally. Tergites of gaster reticulate.

Mesoscutum and axillae with rather strong horizontal black hairs. Scutellum with thin and long horizontal grey hairs. Lateral corners of propodeum dorsally with dense white pubescence; propodeum with white horizontal hairs on its lateral sides. Linea calva of the forewing well developed, open posteriorly.

Body length 2.35 mm.

Male unknown.

**ETYMOLOGY.** The species is named after Dr. Alexandra Petrovna Sorokina (All Russian Institute of Plant Protection, St. Petersburg – Pushkin), specialist on taxonomy and biology of *Trichogramma*.

**COMMENTS.** The new species is similar in colour of mesoscutum, shape of 6th funicular segment of antenna, more or less transverse sutures of antennal clava, completely black tegulae, and long first segment of funicle, to *Prionomastix montana* Prinsloo, 1986, reared in the Republic of South Africa from a nymph of *Dukeobelus simplex* Walker (Membracidae) [Prinsloo, 1986] and differs from it in the following characters:

<i>Prionomastix montana</i> (♀)	<i>Prionomastix sorokinae</i> sp.n. (♀)
Distance between antennal toruli equal to width of torulus.	Distance between antennal toruli twice less than width of torulus.
First funicle segment of antenna less than two times as long as wide. Only first funicle segment without rhinaria. First funicle segment and clava mostly brownish-yellow, the remaining part of the funicle segments mostly blackish, brownish-yellow lateroventrally.	First funicle segment of antenna 2.5 times as long as wide. First to third funicle segments without rhinaria. Funicle and clava black.
Fore wing with two dark transverse bands. Mid tibial spur white.	Fore wing with one dark transverse band. Midtibial spur dark yellowish-brown.
Thorax without any metallic reflections.	Thorax with metallic reflections.

## References

- Annecke D.P. 1962. New reared species of *Prionomastix* Mayr with synonymical notes (Hymenoptera, Encyrtidae) // South African J. Agric. Sci. Vol.5. No.3. P.503–513.
- Gordh G. & V.A. Trjapitzin. 1981. Taxonomic studies of the Encyrtidae with the descriptions of a new species and a new genus (Hymenoptera, Chalcidoidea) // Univ. California Publ. Entomol. Vol.93. P. i-vi +1–55.
- Hoffer A. 1957. Miscellanea encyrtidologica I. 8. Předběžna práce k monografickému zpracování čs. Encyrtidae (Hym., Chalcidoidea) // Acta Entomol. Mus. Nation. Pragae. Vol.31. No. 486. P.191–220.
- Prinsloo G.L. 1986. On some poorly known southern African Encyrtidae (Hymenoptera: Chalcidoidea), with descriptions of four new species // J. Entomol. Soc. S. Africa. Vol.49. No.1. P.121–136.
- Trjapitzin V.A. 1989. [A brief review of parasitic Hymenoptera of the genus *Prionomastix* Mayr, 1876, with description of a new species from Costa Rica] // Trudy Zool. Inst. AN SSSR. Vol.191. P.103–108 [in Russian].
- Trjapitzin V.A. & E. Ruiz Cancino. 1998. Descripción de una especie del género *Prionomastix* Mayr (Hymenoptera: Chalcidoidea: Encyrtidae) del Estado de Puebla, Mexico, con una clave para las especies conocidas del género // Acta Zool. Mexicana (nueva ser.). No.75. P.163–169.