

Description of a new species of *Brethesiella* Porter, 1920 (Hymenoptera: Encyrtidae) from Brazil

Описание нового вида *Brethesiella* Porter, 1920 (Hymenoptera: Encyrtidae) из Бразилии

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КЛЮЧЕВЫЕ СЛОВА: Hymenoptera, Encyrtidae, *Brethesiella tatiana*, новый вид, Margarodidae, Бразилия

ABSTRACT. A new species of Encyrtidae (Hymenoptera), *Brethesiella tatiana* S. Triapitsyn, is described from the state of Bahia, Brazil. It is a parasitoid of an unidentified margarodid scale (Hemiptera: Margarodidae) on *Licania tomentosa* (Benthem) Fritsch.

РЕЗЮМЕ. Из штата Бая в Бразилии описан новый вид Encyrtidae (Hymenoptera), *Brethesiella tatiana* S. Triapitsyn, **sp.n.**, паразитоид не определённого червеца (Hemiptera: Margarodidae) на *Licania tomentosa* (Benthem) Fritsch.

Introduction

The New World encyrtid genus *Brethesiella* Porter, 1920 (Hymenoptera: Encyrtidae) was reviewed recently by Trjapitzin & Triapitsyn [2006], who provided a key to females of its described species. All known species of *Brethesiella* are gregarious parasitoids of Margarodidae (Hemiptera: Sternorrhyncha) [Trjapitzin & Triapitsyn, 2006]. Here described and illustrated is a new, very distinctive species of this genus from the state of Bahia in Brazil.

Terms for morphological features follow Gibson [1997]. All measurements (as length or length/width) are given in microns (μm). An abbreviation used in the description is: F — an antennal funicle segment. Abbreviations for the depositories of specimens are as follows: UCRC — Entomology Research Museum, University of California, Riverside, California, USA; USNM — National Museum of Natural History, Washington, District of Columbia, USA.

Brethesiella tatiana S. Triapitsyn, **sp.n.** Figs 1–7.

TYPE MATERIAL. Holotype, ♀ on slide, labeled: “Bahia, Brazil X-4-[19]34 Ex. *Moquilles* [sic] *tomentosa* Coll. H. Compere Ex. Coccid” (UCRC). Paratypes: 1 ♀ on slide, 12 ♀♀ and 1 ♂ on points, same label data as holotype (all in UCRC except 1 ♀ on point in USNM); 1 ♀ and 1 ♂ on slides and 4 ♀♀ on points, labeled: “Univ. of Calif. B.I.I. No. A43” (UCRC).

DESCRIPTION. **Female** (holotype and paratypes). Body and appendages mostly yellow-brown except anterior part of

pronotum, posterior parts of mesopleuron, distal half of gaster (partially), and basal half of metatibia brown; mesonotum orange-yellow.

Frontovertex, dorsal part of pronotum, mesoscutum, axillae, tegulae, scutellum, lower part of mesopleuron, and lateral parts of propodeum with minute cellulate sculpture. Pronotum, mesoscutum, axillae, tegulae, and scutellum with short, dusky setae. Poster-lateral parts of propodeum with dense silvery-white pubescence.

Head about as high as wide (as in Fig. 5). Vertex in frontal view convex, about 1/3 head width. Occipital margin sharp. Ocelli in a slightly obtuse triangle, posterior ocelli very close to eye margin. Scrobes very short, not meeting above. Palpi very small and thin, difficult to see; palpal formula 4 : 3.

Antenna (Fig. 1) inserted well below level of lower eye margin, close to mouth margin. Scape about 4.0 x as long as wide, a little wider in the middle. Pedicel longer than combined length of F1 and F2. F2–F6 markedly wider than long. Clava about 1.4 x as long as wide and a little shorter than combined length of 3 preceding funicle segments; apical claval segment strongly truncate.

Mesosoma longer than metasoma. Pronotum narrow, its posterior margin concave. Mesoscutum about 2 x as wide as long. Scutellum longer than wide, about as long as mesoscutum; scutellar apex narrowly rounded and overhanging median part of propodeum (Fig. 2).

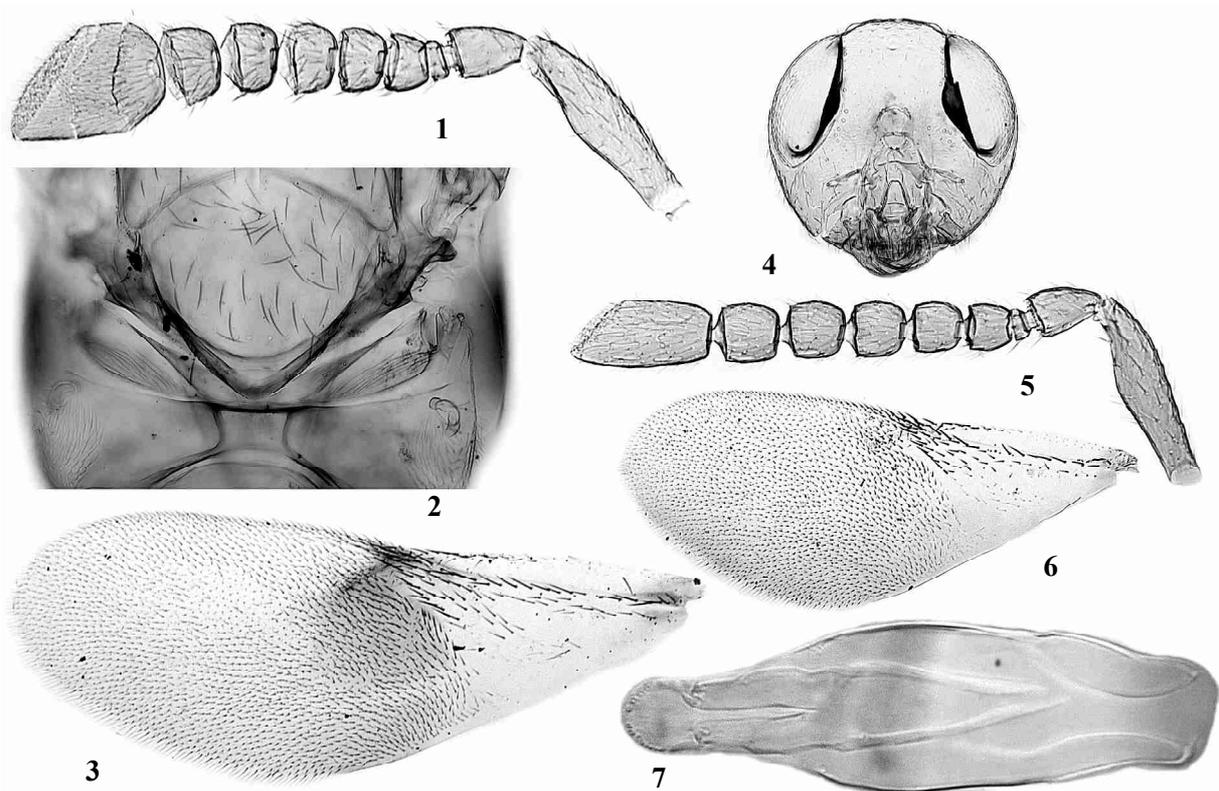
Wings not abbreviated, forewing reaching far beyond apex of gaster. Forewing (Fig. 3) 2.6–2.8 x as long as wide, infuscated behind marginal and stigmal veins. Costal cell 9–10 x as long as wide. Marginal vein longer than wide; postmarginal vein shorter than stigmal vein. Hind wing hyaline, about 4.2 x as long as wide.

Mesobasitarsus as long as combined length of following mesotarsal segments; mesotibial spur a little longer than mesobasitarsus.

Ovipositor very short, not exerted, occupying a little more than half length of gaster; ovipositor length / metatibia length ratio about 0.6:1.

Measurements (holotype). Body (without head): 1076; mesosoma: 615; metasoma: 461; ovipositor: 248. Antenna: scape: 170; pedicel: 55; F1: 12; F2: 27; F3: 36; F4: 36; F5: 39; F6: 38; clava: 125. Forewing: 1046/370; hind wing: 677/161.

Male (paratypes). Similar to female in coloration except mesonotum light brown to brown, without orange, and metatibia brown only basally. Cellulate sculpture on frontovertex more conspicuous than in female. Vertex in frontal view



Figs 1–3. *Brethesiella tatarianae* S.Triapitsyn, sp.n.: 1–3 — female; 4–7 — male; 1, 5 — antennae; 2 — scutellum, metanotum, and propodeum; 3, 6 — forewings; 5 — head; 7 — genitalia.

Рис. 1–3. *Brethesiella tatarianae* S.Triapitsyn, sp.n.: 1–3 — самка; 4–7 — самец; 1, 3 — усики; 2 — скутеллум, среднеспинка и проподеум; 3, 6 — переднее крыло; 5 — голова; 7 — половой аппарат.

about 2/5 head width (Fig. 4). F1 very short, much wider than long; F2–F6 subquadrate; clava entire, about 2.2 x as long as wide, barely wider than F6, and obliquely truncate at apex (Fig. 5). Forewing hyaline (Fig. 6). Genitalia as in Fig. 7.

DIAGNOSIS. This new taxon belongs to the '*latifrons*' species group of *Brethesiella*, outlined by Trjapitzin & Triapitsyn [2006], as it has a 3-segmented labial palpus and a very short, non-exserted ovipositor. From all other described species of this group with known females, it differs in having each of F2–F5 of the female antenna markedly wider than long (at most as wide as long in the other species). From *B. coccidophaga* (Blanchard, 1940), described from Argentina [Blanchard, 1940] and redescribed by De Santis [1964], which is known from male sex only, *B. tatarianae* differs in the proportions of the following funicle segments of the male antenna: in *B. tatarianae*, each of F2–F5 is about as wide as long whereas F2 and F4 are distinctly longer than wide in *B. coccidophaga* [Blanchard, 1940; De Santis, 1964].

ETYMOLOGY. This species is named after my wife Tatiana.

HOST. The remains of the host were point-mounted together with a female of *B. tatarianae* (of which only a forewing remains, therefore this specimen is not included in the paratype series). It is a margarodid scale, whose identity cannot be positively determined any further. According to the original labels, this parasitized scale was collected on *Licania tomentosa* (Benthem) Fritsch (= *Moquilea tomentosa* Benthem).

COMMENTS. According to the handwritten (apparently by Harry S. Smith) notes of the University of California Beneficial Insects Investigations, which are kept at the Insectary and Quarantine Facility, Department of Entomology, Uni-

versity of California at Riverside, California, USA, the "B.I.I. No. A43" label of some of the paratypes of *B. tatarianae* corresponds to the record of Harold Compere's 4th shipment of parasitoids from Brazil; these were collected by H. Compere in an unspecified locality in Bahia and received in Riverside on 13.X.1934 (thus, they were collected in the beginning of October 1934; it is almost certain that these specimens might belong to the same series with the holotype of this species).

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