

**SPECIES OF THE GENUS OOBIVS, GEN. N. (HYMENOPTERA,  
ENCYRTIDAE) IN THE USSR**

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V tomto příspěvku podávám popis nového rodu čeledi Encyrtidae — *Oobivus*, gen. n. — s typickým druhem *Tyndarichus rudnevi* Now. a jednoho nového druhu *O. zahaïkevitshi*, sp. n., který byl vychován v SSSR z vajíček krasce *Agrilus viridis* L. (Coleoptera, Buprestidae).

In the years 1927—1928 the Ukrainian entomologist D. F. Rudnev reared a very interesting encyrtid parasite from the eggs of *Cerambyx cerdo* L. (Coleoptera, Cerambycidae). The parasite was sent for identification to S. Nowicki, who described it as a new species of the genus *Tyndarichus* How. — *T. rudnevi* Now. (Nowicki, 1928). According to Rudnev (1957), this species was found in the eggs of *C. cerdo* not only in the Ukraine (Tsherkassy, Kirovograd, Zhitomir, Zakarpatye regions), but also in West Georgia (Gulripshi in Abkhazia, Adzhamety forest reserve near station Rioni).

The analysis of the characters of *T. rudnevi* shows that this species was placed in the genus *Tyndarichus* erroneously. The type-species of the genus *Tyndarichus* Howard (1910) is a Japanese species *T. navae* How. — a secondary parasite in the eggs of the gipsy moth *Ocneria dispar* L. through *Ooencyrtus kuwanai* (How.) and *Anastatus* sp., probably *disparis* Ruschka. Mercet (1921), who received the typical specimens of *T. navae* from the USA, placed in this genus two old European species — *Encyrtus melanacis* Dalm. and *E. scaurus* Walk. — and described a new species, *T. laeviscutellum* Merc., from Spain. The hosts of *T. melanacis* and *T. laeviscutellum* remain unknown. *T. scaurus* was reared in Sweden from the caterpillars of the geometrid moths *Cidaria ocellata* L., *Eupithecia innotata* Hufn. and *E. icterata* Vill. (Jansson, 1954), in which it develops probably as a secondary parasite, for in the first case it was reared together with the polyembryonic primary parasite *Litomastix truncatulus* Thoms. Not long ago *T. kuriri* Fahr. was described from Yugoslavia (Fahringer in: Kurir, 1944), which is a secondary parasite of the gipsy moth through *Anastatus disparis*. It is worthy of note that *T. clavatus* Eady, described from New Guinea (Eady, 1960), is a secondary parasite of the banana scab moth *Nacoleia octasema* (Meyr.) (Pyralidae), the host of this tropical species being *Pentalitomastix nacoleiae* (Eady). All described species of the genus *Tyndarichus* have a triangular expansion

in the apical third of the submarginal vein of the anterior wing. On the submarginal vein of *T. rudnevi* such a structure is absent. In addition, the maxillary and labial palpi of *T. rudnevi* have respectively 3 and 1 segments, which is unusual for Encyrtidae. The great majority of palae-arctic encyrtids have 4-segmented maxillary and 3-segmented labial palpi and only a few genera possess a reduced number of segments. This number is usually constant in the species of the same genus, and offers as a rule a good generic character. In *T. navae* from China (Tsingtao), kindly presented to the collection of the Zoological Institute by the Chinese entomologist Liao Ting-shi, *T. melanacis* from the Altai and *T. scaurus* from Armenia, the maxillary palpi are 4-segmented, the labial 3-segmented. These important distinctions of *T. rudnevi*, together with some other characters, made it possible to erect the new genus with *T. rudnevi* as the type-species. An egg-parasite of *Agrilus viridis* described herewith as new also belongs to the same new genus.

### **Oobius**, gen. n.

Female. Body small, about 1 mm in length, compact, black, with slight metallic lustre. Head hypognathic. Frontovortex rather wide. Ocelli in an obtuse-angled triangle. Cheeks convergent. Antennae (fig. 1) below the ocular line; scape not expanded below, funicle clavate, 6-segmented, club large, 3-segmented, and obliquely truncate at apex. Mandibles 3-toothed (fig. 2). Maxillary palpi 3-segmented (fig. 3), labial palpi 1-segmented. Pronotum transverse. Mesoscutum twice wider than long, reticulate. Parapsidal furrows absent. Apices of axillae slightly apart. Scutellum wider than long, very finely longitudinally striated. Postphragma long. Wings normally developed, hyaline. Anterior wings broad, with rather broad costal cell; venation (fig. 4) reaches to half the length of the wing. Submarginal vein without a triangular expansion in the apical third. Marginal vein broad,  $1\frac{1}{2}$ —2 times as long as wide; postmarginal vein a little longer than marginal; stigmal strongly clavate, almost hyaline, a little longer than marginal or equal to it and a little shorter than postmarginal; apex of stigmal vein beak-like pointed, with three round sensilles. Marginal fringe of anterior wings short. Mesotibial spur a little shorter than corresponding metatarsus. Abdomen in length subequal to the thorax. Ovipositor thick, haired, its extending part about  $\frac{1}{5}$ — $\frac{1}{4}$  the length of abdomen. Seventh sternite almost reaching the apex of abdomen.

Male. Differs from the female in filiform antennae, with funicular segments longer than wide; club solid, a little longer than two preceding segments taken together. Digital sclerites of the phallus developed, each with two spines.

Type-species: *Tyndarichus rudnevi* Nowicki, 1928.

The systematic position of the new genus is still unknown. The new genus may be distinguished from the genus *Tyndarichus* by the following characters:

**Tyndarichus** How., ♀

Scape expanded below, lamelliform.  
Maxillary palpi 4-segmented, labial palpi 3-segmented.

Submarginal vein of anterior wing with a triangular expansion in the apical third.

Scutellum reticulate or smooth.

Mesotibial spur equal in length to corresponding metatarsus.

Seventh abdominal sternite not or hardly reaching the middle of abdomen; outer plates of ovipositor exposed.

**Oobius**, gen. n., ♀

Scape cylindrical (fig. 1).

Maxillary palpi 3-segmented (fig. 3), labial palpi 1-segmented.

Submarginal vein without a triangular expansion in the apical third.

Scutellum longitudinally striated.

Mesotibial spur a little shorter than corresponding metatarsus.

Seventh abdominal sternite almost reaching the apex of abdomen; outer plates of ovipositor concealed.

**Oobius zahaikevitchi**, sp. n.

Female. Head as wide as thorax. Frontoververtex a little wider than long. Anterior margin of the front concave. Hind ocelli almost adjacent to the inner eye margins and at about their diameter from the occipital margin. The margin of occiput slightly concave, acute. Cheeks a little shorter than eyes. Facial impression deep; scrobes convergent, median elevation of the face developed, well noticeable from above. Radicula of the antennae (fig. 1) three times as long as wide, approximately three times shorter than scape and only a little shorter than pedicel. Scape slightly narrowed to the apex, five times longer than its greatest width. Pedicel twice longer than its maximum width, about two and one-half times shorter than scape and equal in length to the first three funicular segments taken together. The first four funicular segments small, subequal in width, moniliform; the first segment approximately as long as wide, second, third and fourth slightly transverse. The last two funicular segments large, subquadrate; the sixth a little longer than the fifth, these two segments combined only a little shorter than the other funicular segments taken together. Club wider and a little shorter than the funicle. Linear sensillae developed on the club and last two funicular segments. Mandibular teeth (fig. 2) unequal in length: the outer tooth large, clearly apart, median and inner teeth small. Third segment of maxillary palpi a little more than twice longer than the second (fig. 3). Scutellum  $1\frac{1}{2}$  times wider than long. Postphragma only a little shorter than scutellum. Anterior wing twice longer than its maximum width. Marginal vein (fig. 4) approximately  $1\frac{1}{2}$  times longer than wide, stigmal a little longer than marginal. Pygostyles approximately at one third of the length of the abdomen. Outer plates of ovipositor almost twice longer than wide. Sheaths of ovipositor twice shorter than its inner plates.

The main colour of the body black with slight golden metallic lustre. Head brownish-black, frontoververtex with slight greenish tint, cheeks with bluish tint. Scape and pedicel of the antennae black with light apices, the first five funicular segments and club dark-brown, the last funicular segment dirty yellowish-white, truncation of the club light. Mandibles brown, with outer and median teeth almost black. Tegulae brownish-

black. Legs dark-brown, with light trochanters of all three pairs and apices of front and mid femora; bases and apices of front and hind tibiae yellowish-white; middle tibiae yellowish-white with obscure ring near the base, width of this ring approximately equal to  $\frac{1}{4}$  of the length of the tibia; front tarsi brownish, mid tarsi yellowish-white with brownish last segment, hind tarsi brownish with yellowish-white first and second

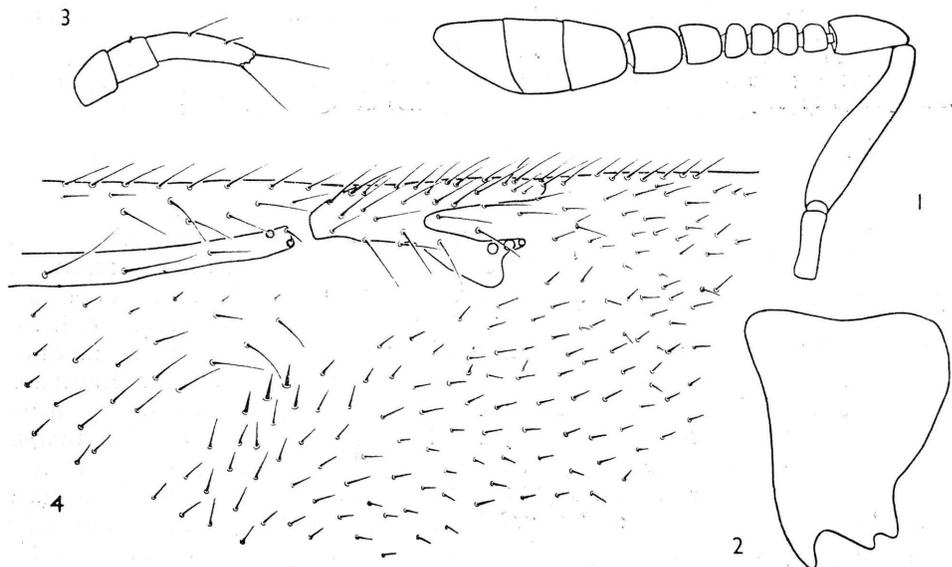


Fig. 1—4. *Oobius zahaikevitchi*, sp. n., ♀: 1 — antenna; 2 — mandible; 3 — maxillary palpus; 4 — part of the fore wing.

segments. Dark and light parts of the legs not clearly delimited and rather variable. Pubescence of the notum light. Length of the body about 1 mm.

Male unknown.

Zhuravlevka, Vinnitza region; from the eggs of *Agrilus viridis* L. on *Carpinus betulus* L. 19. VI. 1956, 6 ♀♀ (holotype and paratypes) (I. Zahaikevitch). Savalskoye lesnitshestvo (forestry), Voronezh region; from the eggs of *A. viridis* on *Betula*, 2. VII. 1954, 1 ♀ (paratype) (V. Stark).

The species is dedicated to I. K. Zahaikevitch, entomologist of the Museum of Natural History in Lwow. Holotype and paratypes are preserved in the Zoological Institute, Academy of Sciences of the USSR, in Leningrad.

Key to the species of the genus *Oobius* (♀♀):

- 1 (2) Pedicel of antenna equal to the first four funicular segments taken together. Fifth funicular segment wider than long and only scarcely larger than preceding funicular segments. Club longer than funicle. First funicular segment brownish-yellow. Mandibular teeth subequal. Third segment of maxillary palpi almost three times as long as the second. — The Ukraine, Georgia [from the eggs of *Cerambyx cerdo* L.] . . . . . *O. rudnevi* (Now.)

- 2 (1) Pedicel of antenna (fig. 1) equal to the first three funicular segments taken together. Fifth funicular segment subquadrate and considerably larger than preceding funicular segments. Club shorter than funicle. First funicular segment dark-brown. Outer mandibular tooth very large and clearly apart (fig. 2). Third segment of maxillary palpi a little more than twice longer than the second (fig. 3). — The Ukraine, the Voronezh region (from the eggs of *Agrilus viridis* L.) . . .  
*O. zahaikevitchi*, sp. n.

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