

## A New Species of *Tephritis* (Diptera, Tephritidae) from Kazakhstan\*

V. A. KORNEYEV and E. P. KAMENEVA

All-Union Institute of Biological Methods of Plant Protection, Kishinev

In collection of insect-phytophages of weeds and wild growing plants of Alma-Ata Prov., a new species of *Tephritis* Latreille, 1804, was found in flowers of *Sonchus palustris* L. Holotype and part of paratypes are deposited in the collection of the Institute of Zoology, USSR Academy of Sciences, Kiev. The rest of the material is deposited in the collection of the All-Union Institute of Biological Methods of Plant Protection, Kishinev, and in the Zoological Institute, USSR Academy of Sciences, Leningrad. The species is named in memory of dipterologist Vladimir Grigoryevich Kovalev.

*Tephritis kovalevi* Korneyev et Kameneva, sp. n.

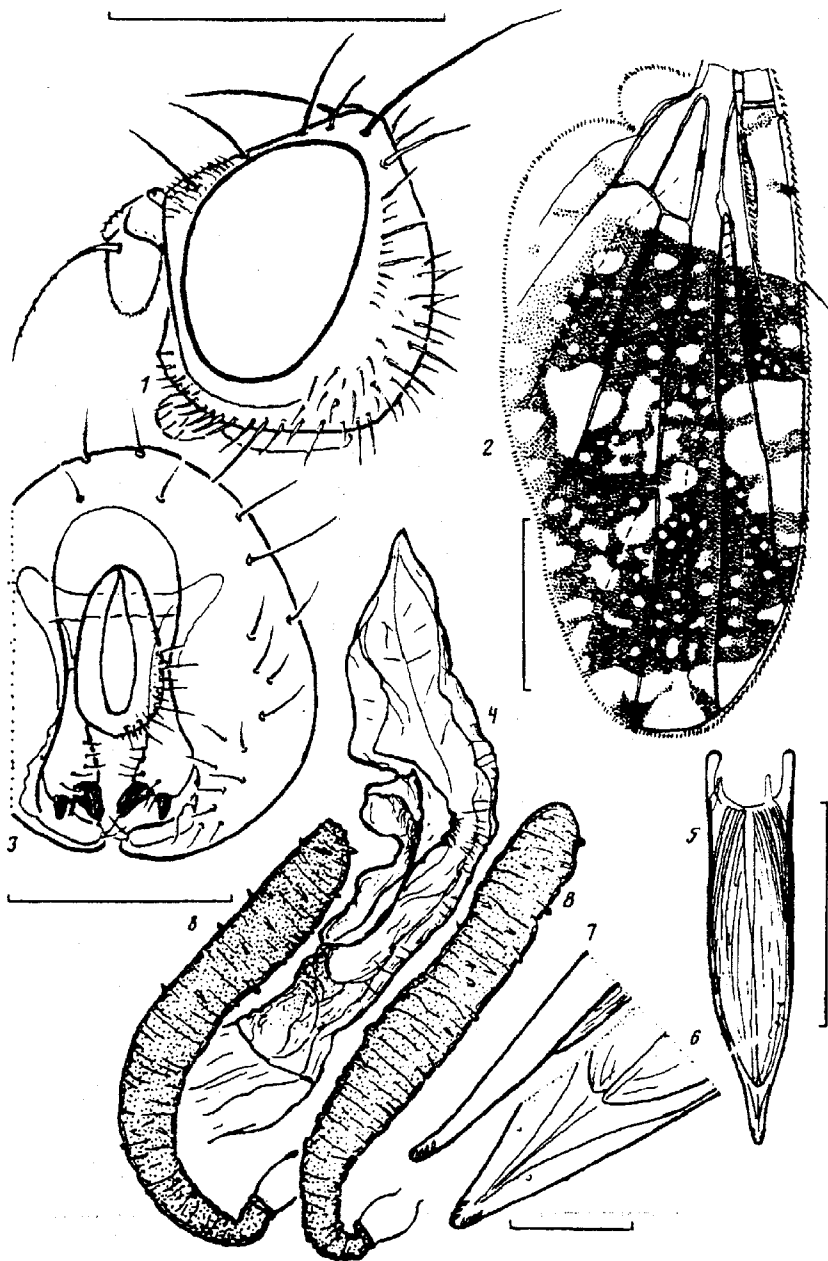
**Material.** Holotype ♂ and paratypes, 3 ♂s and 7 ♀s: Kazakhstan, vicinity of Talgar, Alma-Ata Preserve, from flowers of *Sonchus palustris* L. coll. 24 September, appearance of adults 8-11 October 1986 (Korneyev and Kameneva).

**Description.** ♂. Head (Fig., 1) yellow, opaque, with more or less large black spot on the occiput, sometimes spreading to frons between ocellar triangle and postvertical bristles; proportion of head length to its height and width, 1.0:1.2:1.7. Frons opaque, above frontal lunule with pale hairs, its width slightly greater than length. Antennae yellow, 1st segment with yellowish, 2nd with black hairs; 3rd segment sometimes dark brown; arista short, pubescent yellow at base, mostly black. Face noticeably concave. Facialia and peristomalialia with short brown hairs. Proboscis yellow, with long pale hairs, length of its sucking lobes 0.3-0.4 that of oral cavity. Palpae yellow, weakly dilated apically, with yellow and black hairs. Occipital hairs, genal and gular bristles pale brown. Head chaetotaxy typical of the genus; posterior *or*, *pvt*, *poc*, and *vte*, and also 4-6 *po* white; other bristles dark brown.

Thorax yellow, with weak grayish pollinosity and white hairs. In some individuals mesonotum has red-brown lyre-shaped pattern of 4 to 6 stripes, often slightly or not pronounced at all; pollinosity with 3 nonhyaline thin, pale-brown stripes. Before scutellar suture, in middle of scutellum at its base, and on sternopleura and hypopleura black spots often present; postnotum reddish yellow, with 1 or 2 black spots in middle or with none, grayish pollinose. Thoracic bristles pale brown or dark yellow; posterior *npl* white; apical *scut* little longer than 1/4 of basal *scut*.

Wings (Fig., 2) with grayish brown pattern, including numerous clear and yellowish dots and partly merged spots; pterostigma dark brown, in ♂s with 1-2 yellow dots or none; brown spots at apexes of veins  $r_{4+5}$  and *m* are connected with the rest of the pattern by narrow bridges, or are isolated; at apex of cell  $R_1$  clear spot; fork  $r_{2+3}$  clear;  $r_{4+5}$  with 4-6 bristles below. Wing and thoracic scales white, with white fringe. Halteres yellow.

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*Tephritis kovalevi* Korneyev et Kameneva, sp. n.: 1) head, left side; 2) wing; 3) hypandrium from behind; 4) apex of aedeagus; 5) ovipositor point; 6) the same enlarged, ventrally; 7) the same, right side; 8) spermathecae. Scale (mm): 1, 2) 1; 3, 5) 0.5; 4, 6-8) 0.1.

Legs yellow, with brown and yellow hairs, pale yellow and white bristles.

Abdomen yellow, with white hairs; 3rd and 4th and especially 5th tergite pale brown.

**Genitalia.** Hypandrium (Fig., 3) yellow. Aedeagus apex (Fig., 4) as usual for the genus structure.

Body length 4.0-4.3 mm, wing length 4.0-4.3 mm.

♀. Similar to ♂, but ♀ pterostigma with hyaline spot or, more rarely, a yellow dot; 3-6th tergites of abdomen more often without black spots. Basal segment of ovipositor reddish yellow, with pale brown hairs, shorter than last 2 abdominal tergites together. Point of ovipositor as in Fig., 5-7. Two strongly extended spermatheca with sparse papilla (Fig., 8).

Body length 4.0-4.7 mm; wing length 3.7-4.5 mm.

**Differential diagnosis.** This species is close to two other Palearctic species from flowers of Asteracea *Ticorium* tribe, particularly *T. formosa* Lw. and *T. truncata* Lw., in following characters, cell  $R_1$  distally of large hyaline spots with a small spot, vein  $r_{4+5}$  with bristles below, fucous pattern of wing includes numerous pale dots and occupies entire cell  $D$ , thorax and abdomen white hairs only; however, in both species compared, thorax and abdomen black, and in *T. kovalevi* mostly reddish yellow; new species differs from *T. formosa* in the presence of hyaline spot in cell  $R_3$  proximally from  $ta$ , and differs from *T. truncata* in weakly pronounced fucous pattern in cells  $Cua(=Cp_3)$  proximally from fold, and also  $A_1$  and  $A_2$  (= anal lobe). In the identification key table of Hering (1944)<sup>1</sup>, *T. kovalevi* fits thesis 19 (*T. truncata*) but differs in characters listed above.

**Biology.** Larvae live in flowers of *Sonchus palustris* L. which grow on river banks in the middle mountain zone (1400-1500 m), causing deformation of receptacles by feeding in achenes like larvae of *T. dilacewrata* Lw. and *T. formosa* Lw.

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<sup>1</sup>Hering, E. M. 1944. Bestimmungstabelle der Gattung *Tephritis* Latreille, 1804. *Siruna Seva* 5: 17-31.