

The larva of *Tachysphex plicosus* COSTA (Hymenoptera,  
Sphecidae)

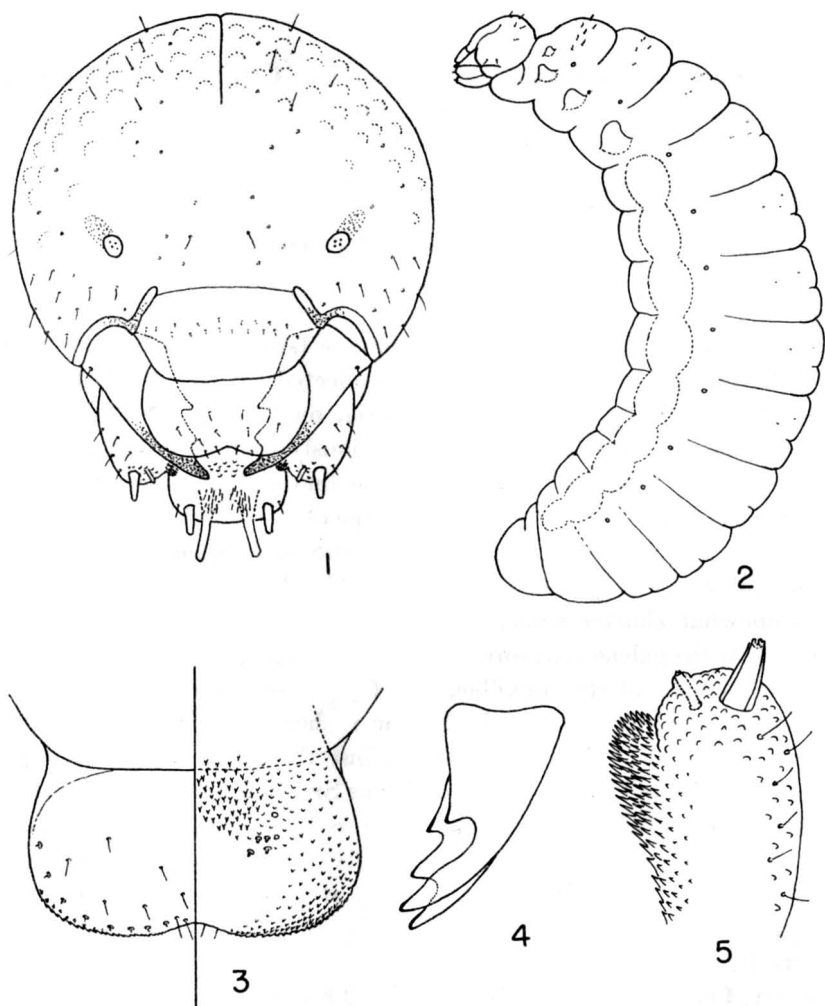
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The following description of the mature larva of *Tachysphex plicosus* COSTA is based upon three specimens collected by Dr. W. J. PULAWSKI at Vlado Trytshkov near Sofia, Bulgaria, on 22 July 1972. The larvae of several species of this genus have previously been described by GRANDI (1961) and by EVANS (1958, 1964). The larva of *T. plicosus* resembles these species in general body form, in shape of the mandibles and maxillae, form of the spinnerets, and many other features. It is, however, distinctive in the following respects: (1) the thoracic dorsum bears many fewer and somewhat shorter setae, (2) head setae are shorter and fewer in number, (3) the galeae are more elongate, although protruding only slightly from the surface of the maxillae, and (4) the oral surface of the labium is in considerable part smooth. In the rather strongly bilobed labrum, *plicosus* resembles *lativalvis* THOMSON, but the margin of the labrum is scarcely bristly, in this respect like *nitidus* SPINOLA and *costai* DESTEFANI, as described by GRANDI. Because of the reduced setae on the head and body, *plicosus* will not key unequivocally to *Tachysphex* in the tables and keys provided by EVANS. Obviously it is a distinctive species, and the generic concept of the larvae must be broadened slightly to accommodate it.

**BODY.** Length 9 mm; maximum width 2.8 mm. Body tapered anteriorly to a somewhat neck-like constriction behind head; posterior end of body bluntly rounded, anus ventral in position (Fig. 2). Prothorax with conically protruding pleural lobes, also with a pair of small protuberances dorsad of these; pleural lobes of meso- and metathorax somewhat prom-

inent, those of abdomen much less so. Spiracles small, weakly pigmented, all 10 pairs about same size; peritreme large; atrium lined with ridges which form large, irregular polygons; opening into subatrium small, unarmed. Integument smooth except very minutely spinulose over parts of venter; pronotum crossed by a row of about 12 setae, the longest



Figs. 1-5. Mature larva of *Tachysphex plicatus* COSTA. 1, — head, anterior view, 2 — body and head, lateral view, 3 — labrum (left) and epipharynx (right), 4 — mandible, ventral (posterior) view, 5 — maxilla, lateral surface toward right

measuring 0.06 mm; remaining segments with only a few minute dorsal setae.

**HEAD.** Width 1.1 mm; height (exclusive of labrum) 1.0 mm (Fig. 1). Weakly pigmented except apices of mandibles dark brown, pleurostomal thickenings and palpi light brown, also with an oblique light brown streak extending dorsolaterad of each antennal socket. Front with a vertical depression just mesad of each antennal orbit, also with a pair of smaller depressions centrally; frontoclypeal suture sharply defined. Parietal bands absent. Antennal orbits ovoid, only about 0.06 mm in maximum diameter, each orbit with 3 or 4 small sensilla set in membrane. Head with scattered punctures, most of which give rise to setae, the longest ones (at top and lower sides) about same length as body setae; clypeus with a band of about 18 setigerous punctures.

**MOUTHPARTS.** Labrum 0.38 mm wide, somewhat bilobed; surface with 16 setae, apical margin with numerous very small sensilla, weakly bristly at apical lateral margins; epipharynx spinulose laterally and mediobasally, otherwise smooth except for a group of sensory pegs on each side of the midline (Fig. 3). Mandibles 0.42 mm long, 0.22 mm wide at the base, bearing a single seta near the base laterally; apex with five strong teeth which tend to surround a concavity (Fig. 4). Maxillae setose laterally, lacinial area produced, strongly spinulose; palpi about 0.05 mm long; galeae slightly shorter and much more slender, although protruding only slightly from surface of maxilla (Fig. 5). Hypopharynx densely spinulose. Labium with oral surface smooth except spinulose toward apex; palpi unusually slender, 0.06 mm long; spinnerets considerably exceeding palpi.

#### STRESZCZENIE

Larwa *Tachysphex plicosus* różni się od znanych dotychczas larw tego rodzaju 1) obecnością mniej licznych i nieco krótszych szczecinek na grzbietowej stronie tułowia, 2) mniej licznymi i nieco krótszymi szczecinkami głowowymi, 3) bardziej wydłużoną galeą, 4) w znacznej części gładką oralną powierzchnią wargi dolnej.

## REFERENCES — PIŚMIENNICTWO

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