

# A new species of *Thyridanthrax* from southern Greece, Pelopónnisos (Diptera: Bombyliidae)

J. Dils & G. Van De Weyer

**Samenvatting.** Een nieuwe *Thyridanthrax*-soort uit Zuid-Griekenland, Pelopónnisos (Diptera: Bombyliidae)

Op de Pelopónnisos werden 109 exemplaren van een nieuwe *Thyridanthrax*-soort verzameld die hierna wordt beschreven.

**Résumé.** Une nouvelle espèce de *Thyridanthrax* du sud de la Grèce, Péloponnèse (Diptera: Bombyliidae) 109 exemplaires d'une nouvelle espèce du genre *Thyridanthrax* furent capturés dans le Péloponnèse. Cette nouvelle espèce est décrite ci-dessous.

**Key-words:** *Thyridanthrax kolokotronis* sp. n. - Bombyliidae - Greece.

Dils, J.: Krekelberg 149, B-2940 Stabroek.

Van de Weyer G.: Unolaan 69, B-2620 Hemiksem.

During an early summer expedition from late May to late June 1995, 109 specimens of an unknown taxon of the genus *Thyridanthrax* were collected by the first author. A careful comparison with other *Thyridanthrax* Osten-Sacken, 1886 and *Exoprosopa* Macquart, 1840 material from the Koninklijk Belgisch Instituut voor Natuurwetenschappen (K.B.I.N.), Brussels and the Instituut voor Systematiek en Populatiebiologie (Zoölogisch Museum), Amsterdam, (I.T.Z.), the collection of the Vlaamse Vereniging voor Entomologie (V.V.E.), Antwerpen, the author's private collection and the original descriptions of all *Thyridanthrax* species, revealed that the specimens belong to a new species. Special attention was paid to the comparison with *Thyridanthrax unctus* (Loew, 1869), which also occurs on the Pelopónnisos and *Thyridanthrax agnitionalis* (Austen, 1937) described from Israel.

Although the specimens have minute spines on the front leg tibia (a character usually attributed to the genus *Villa* Lioy, 1864), we place them under the genus *Thyridanthrax*. The shape of the penis supports such an arrangement.

## *Thyridanthrax kolokotronis* sp. n.

Holotype: ♂, Greece, Pelopónnisos, Arkadia, Manthirea, 600 m, 30.V.1995, in coll. J. Dils.

Paratypes: 72♂ + 37♀: 2♀, Pelopónnisos, Ilia, Pírgos, 100 m, 28.V.1995; 2♂, Pelopónnisos, Ahaia, Sella, 500 m, 30.V.1995; 43♂, Pelopónnisos, Arkadia, Manthirea, 600 m, 30.V.1995; 4♀, Pelopónnisos, Arkadia, Manthirea, 600 m, 31.V.1995; 2♀, Pelopónnisos, Arkadia, Manthirea, 600 m, 15.VI.1995; 27♂, Pelopónnisos, Arkadia, Alepohori, 850 m, 15.VI.1995; 28♀, Pelopónnisos, Arkadia, Alepohori, 850 m, 15.VI.1995; 1♀, Pelopónnisos, Lakonia, Taygetos Oros, 900-1600 m, 16.VI.1995.

Paratypes deposited in the collections of J. Dils, K.B.I.N. (Brussels) and I.T.Z. (Amsterdam).

The head, thorax, legs and wings of both sexes are described together, because sexual dimorphism was only noted in the abdomen.

**1. Head:** Face bluntly conical; ground colour black; dent in frons (nearly always round), median between antennae and ocellar tubercle. Clypeus with minute hairs, slate-grey pollinose. Gena, face, frons and ocellar tubercle with thick erect black hairs, those on the centre of the face are shorter. Face and lower part of frons sparsely covered with adjacent reflecting yellowish scales. Occiput clothed with minute black and ochreous hairs, near the bisection of the eye margin the same scales as on the face and lower frons, cavity with longer erect fox-red hairs. Antennae, first segment broad with long, second

segment with shorter bristle-like hairs, third segment pear-shaped, bald, with style half as long as the third segment. Third segment slightly longer than the sum of first and second.

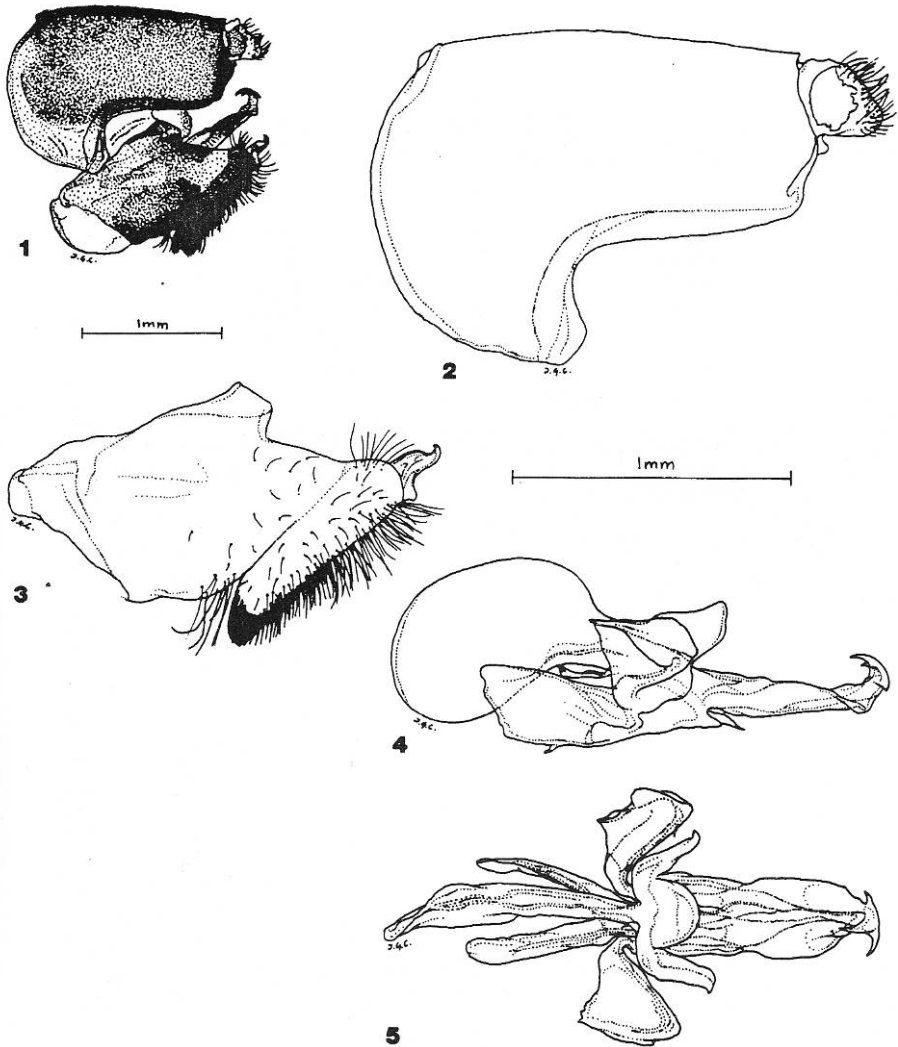
**2. Thorax:** Mesonotum black-brown, clothed with buff hair, short on dorsum (where they are mixed with erect black hairs, as long as the third segment of antenna) long on collar, humeri, notopleuron and post-alar callosity. Upper half of mesopleuron, pteropleuron and metapleuron buff, hairs longer than antennae, lower half more scarcely covered with black hairs. Plumula buff, hypopleuron bald. Prosternum, mesosternum and coxa clothed with long black hairs. Supraalar, intraalar, postalar and scutellar bristles black. Scutellum ground colour black with brown pattern, long buff hairs and adjacent black scales.

**3. Legs:** Black, femur clothed with black scales, f1 ventral with black hairs, f2 and f3 ventral with hairs and 7 to 10 strong bristles, t1 with minute spines, ventral with short dark-brown hairs, t2 and t3 with strong long bristles, tarsi ventral with minute spines, claws without pulvilli or thorn at the base.

**4.1. Abdomen:** Male: Ground colour black with adjacent black scales, only first tergite without adjacent black scales, lateral with erected light-buff hairs reaching the middle (here sometimes a few black hairs) of the tergite. Second tergite with fine erect buff and black hairs, sides anterior with buff and posterior with black hairs. T3, T4, T5 with erect black hairs, mixed with a few light-coloured hairs, lateral with black brushes, larger triangles of white scales on side of T3 than on T4, not reaching the middle of the tergite. T6 lateral with black and white brush, T6 and T7 black adjacent scales, covered by a mirror of white scales and scattered white hairs. Sternites black, scarcely clothed with black hairs and scales. Epipyg, epandrium big, dark brown with scattered erect light and dark hairs.

**4.2. Abdomen:** Female: All markings as in the male, with exception of the abdominal white scaling, triangles, not reaching the middle of the tergites on the sides of T2, T4, T6 and T7. On T3 the white scales are forming a band, nearly covering half the tergite and only in fresh specimens the band reaches the middle of the tergite. On T6 and T7 black hairs, instead of white as in the male. In denuded specimens, mostly, the white scales of T6 and T7 are remaining.

**5. Wings:** Costa anterior with black spines, ending on thoracle squama, costal hook and prebasicosta black, well-developed. Veins Cu2 and distal part of r5 light-brown, for the rest black. Subcostal cell, first basal cell, basal area and squamae filled yellow-brown, the same colouration along third longitudinal vein and first anal vein. Squamae fringed with light-buff scales. Dirty brown pattern from apex of r2+r3 across to m1 half way between r-m and the base of r4, where it enters the discoidal cell becoming vague posteriorly, filling first basal cell and the posterior area of the second basal cell. Anterior branch of the third vein always bearing an appendix bending basally. Halteres, knobs ivory-yellow, stalks light-brown with two or three black hairs.

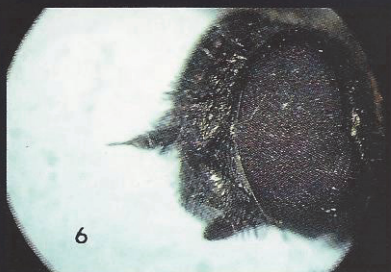
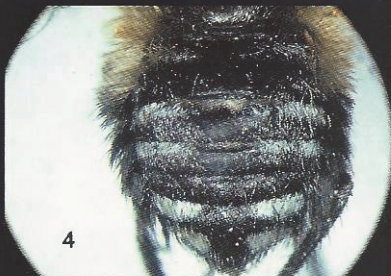
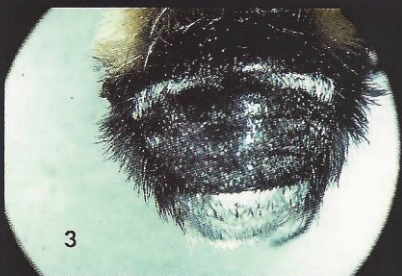


Figs. 1-5: Male genitalia of paratype of *Thyridanthrax kolokotronis* sp. n.; Greece, Arkadía, Alepohóri, 850 m, 15.VIII.1995, leg. et coll. J. Dils, (Prep. 2502 JGC); 1. Genitalia in lateral view, 2. Tegumen, 3. Valva, 4. Aedeagus in ventral view, 5. Aedeagus in dorsal view.

#### 6. Measurements:

Total length : ♂ from 9.2 mm to 13.1 mm, ♀ from 9.0 mm to 10.7 mm.  
 Total width: ♂ from 20.5 mm to 24.6 mm, ♀ from 20.3 mm to 30.6 mm.  
 Wing length: ♂ from 9.79 to 11.32 mm, ♀ from 9.64 mm to 11.63 mm.

Plate 1



### Diagnostic characters

*Thyridanthrax kolokotronis* sp. n. resembles *Thyridanthrax agnitionalis* (Austen, 1937) and *Thyridanthrax unctus* (Loew, 1869). Main differences are:

with *Thyridanthrax agnitionalis* (Austen, 1937)

- Head: the third segment of the antennae are conical. The colouration of the first and second segments is black above and cinnamon below.
- Thorax: metapleural fan white.
- Abdomen: sides of first tergite white, no white mirror at extremity of abdomen.

with *Thyridanthrax unctus* (Loew, 1869)

- Head: edge of mouth and first two segments of antennae ground colour yellow.
- Thorax: hairs on upper half more white, white scales near wing base, pleurae light clothed, plumula white.
- Legs: yellow-brown.
- Wings: costal hook light-brown, prebasicosta with white scales.

The genitalia of *Exoprosopa telamon* (Loew, 1869), figured by Engel (1932-1937), bear a striking resemblance to those of *Thyridanthrax kolokotronis* sp. n. They are considered remarkable for their structure - "höchst eigenartig gebaut"! However, the external morphology of both species is quite different.

### Adaptation of the *Thyridanthrax* key in Engel (1932-1937)

We suggest to adapt the key on page 526 (number 20) by adding the following:

20. A) Flügel ohne schwärzliche Flecken an der Queradern.

Die f beim ♂ und ♀ f fast schwarz. Abdomen beim ♂ mit ausgesprochen weissen Spiegel an 6. und 7. Tergite ..... ♂ und ♀ *kolokotronis* Dils & Van de Weyer.

B) Flügel mit schwärzliche Flecken an der Queradern.

-Schwarzliche Flecken liegen an ..... ♂ und ♀ *stigmulus* Klug.

-Ausser den bei *stigmulus* genannten Flecken ..... ♂ und ♀ *irrorellus* Klug.

### Behaviour

The adults visit flowers, especially Asteraceae (Compositae), in arid places as well as in flowery meadows and grassy places in orchards. They sit with open wings, with the white mirror of the males always conspicuous.

Legend of plate 1:

*Thyridanthrax kolokotronis* sp. n.

1. Paratype ♂, Greece, Pelopónnisos, Arkadia, Manthirea, 600 m, 30.V.1995.
2. Paratype ♀, Greece, Pelopónnisos, Lakonia, Mt. Taygetos, 16.VI.1995.
3. Same as 1, enlarged, abdomen showing white mirror.
4. Same as 2, enlarged, abdomen showing white pattern.
5. Holotype ♂, lateral view, Greece, Pelopónnisos, Arkadia, Manthirea, 600 m, 31.V.1995.
6. Same as 1, detail of head.

### Etymology

The species is named after Theodoros Kolokotronis, a Greek leader, born in the village Dimitsana on the Pelopónnisos, in the province of Arkadia, where most of the flies were found.

### Acknowledgements

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