

A new species of the genus *Conophorus* (Diptera: Bombyliidae) from Turkey

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Abstract. A new species of *Conophorus* is described from Turkey. It is very closely related to *Conophorus nobilis* Loew, 1873 but can readily be distinguished by the form of the proboscis and the colour of the hairs on the frons. The identification key of Bowden (1967) is updated. One female of the new species has also been found on the Greek island of Lesbos.

Samenvatting. Een nieuwe soort uit het genus *Conophorus* (Diptera: Bombyliidae) uit Turkije

Een nieuwe *Conophorus*-soort wordt beschreven uit Turkije. Deze soort is nauw verwant aan *Conophorus nobilis* Loew, 1873, maar kan gemakkelijk onderscheiden worden door de vorm van de proboscis en de kleur van het haar op het voorhoofd. De determinatieleutel van Bowden (1967) wordt vervolledigd. Eén wijfje van de nieuwe soort werd gevangen op het Griekse eiland Lesbos.

Résumé. Une espèce nouvelle du genre *Conophorus* (Diptera: Bombyliidae) de Turquie. Une espèce nouvelle du genre *Conophorus* est décrite de Turquie. Cette espèce est étroitement reliée à *Conophorus nobilis* Loew, 1873, mais peut être distinguée facilement par la forme du proboscis et la couleur des poils sur la tête. La clef de détermination de Bowden (1967) est complétée. Une femelle de la nouvelle espèce fut trouvée sur l'île grecque de Lesbos.

Key words: *Conophorus nobilis* – *Conophorus gracilis* – Diptera – Bombyliidae – Turkey.

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Twelve species from the genus *Conophorus* Loew, 1873 are recorded from Turkey (Hasbenli & Evenhuis 2000). During 1999–2005, we collected a series of *Conophorus* at several localities in Turkey which belong to the group of *Conophorus nobilis* Loew, 1873.

Determining specimens in the *Conophorus nobilis* group is not always an easy task as there has been some confusion created along the years, concerning the admixture of black hairs on the sides of the tergites as well as in the hair colour of this species. Most often the colour is referred to as "citron-yellow" but Paramonov (1940) states that "It seems that this species strongly varies both in body size and in coloration of the hairs. Loew has described a female, which has brightly honey-yellow hairs; the females and males I have, have yellowish hairs, but with a lightly greenish tinge".

Engel (1938) states that there is no admixture of black hairs on the abdomen and in this matter he makes no difference between male and female. The colour he refers to in the identification table is "stark gelb" and in the description "zitronengelb".

Paramonov (1940) however says: "Abdomen at sides (and also slightly from below) with admixture of black hairs, the number of these hairs is slightly varying. However, in many cases these black hairs are masked and are visible under scrutinized inspection only; there are no black hairs at the dorsum of the tergites".

Further Paramonov (1947) writes "Diese Art ist sehr variabel. Die Anzahl der schwarzen Haare längs dem Hinterrand der Hinterleibssegmente an den Seiten und etwas unten ist sehr veränderlich: von 2–3 Stück bis zu sehr bedeutender Anzahl. Beim Männchen der Pertschinsky-Sammlung sind diese Haare sehr zahlreich, wie Büschel bildend". Paramonov also does not make clear if this goes for both sexes.

Bowden (1967) does not mention black hairs on the sides of the tergites of *C. nobilis*. He also refers to the colour as "Pubescence entirely citron-yellow".

Dr. Joachim Ziegler of the Humboldt-Universität zu Berlin, has very kindly sent the first author the female type of *C. nobilis* Loew (coll. Loew // Ploas / nobilis / Lw. // 9616 // Typus [9616 means Elbrus (Iran), Christoph.]). This specimen has an unusual proboscis (fig. 1) for a bombylid and has black hair on the frons, descending along the eye margin till the middle of the gena and an admixture of black hairs on t3, t4 and t5; those hairs are difficult to detect as they are masked by the yellow hairs.

We believe that over the years two species were involved which has caused the confusion in the entomological literature. The males of the two species are quasi identical and from the females one has no black hairs on the sides of the tergites while the other has.

All males of *C. nobilis* that we collected in Turkey have an extensive admixture of black hairs on the sides of the tergites, all females also have black hairs but very reduced in number like mentioned in Paramonov's comment "von 2–3 Stück bis zu sehr bedeutender Anzahl". All males and females of *C. nobilis* have a stout proboscis with big labella (fig. 1). All males and females of the new species have a slender and straight proboscis (fig. 2). With this character alone it is possible to separate *C. nobilis* from the new species.

To integrate this species in the identification key of Bowden (1967) we suggest the following addition, starting from couplet 8:

- 8) –Pubescence entirely citron- to greenish yellow; all bristles on thorax yellow. Abdomen with or without an admixture of black hairs.....11
- Pubescence pale yellow with distinctly white gleam; black bristles obviously present those at sides of abdomen from third segment prominently tufted..... *bombyliformis* Loew
- 9) –Halteres pale, scutellum shining black, at least broadly around margin.....10
- Halteres with knobs black; scutellum entirely matt, heavily pollinose.....*simplex* Loew
- 10) –Occiput with distinct black hair tuft at lower angle of eye; mesonotum black; vein R4 arising at less than right angle.....*rjabovi* Paramonov
- Occiput pale haired without distinct tuft at lower angle of eye; mesonotum predominantly pale haired; vein R4 arising at right angle.....*syriacus* Paramonov
- 11) –Proboscis slender and straight, labella small, female without black hairs on frons...*gracilis* sp. n.
- Proboscis stout, labella big, females with black hairs on frons..... *nobilis* Loew

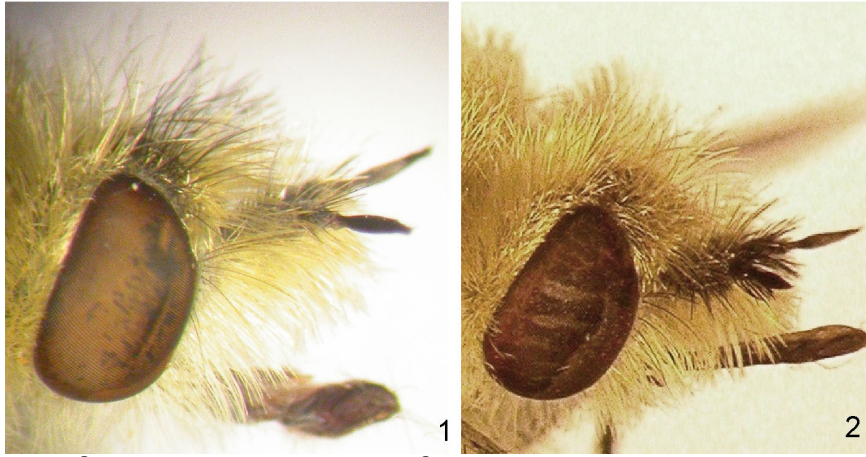


Fig. 1.– ♀ *Conophorus nobilis* Loew, 1873; 2.– ♀ *Conophorus gracilis* sp. n., Turkey.

***Conophorus gracilis* sp. n.**

Description:

♂: Head: ground colour black, hairs on scape ventrally yellow, dorsally and on sides black with an admixture of short yellow hairs. Hair on pedicel black with a few yellow ones. Hair on ocellar tubercle usually black with a few yellow hairs, but in one case the yellow hairs were predominant. A double row of black hairs along the inner eye margin descending to half way the gena. Hair on the occiput yellow and a few hard to find shorter black hairs along the outer eye margin. Proboscis slender.

Thorax: all hairs yellow except a few black on the mesopleurae. Mesonotum also with scarce yellow pubescence of hair like scales.

Abdomen: hairs yellow, on dorsum with a sparse undercoat of appressed yellow hair-like scales. Lateral admixture of black hairs on tergites t2 to t7.

Wings: identical to *Conophorus nobilis*. Haltere reddish yellow, the knob a little darker.

Legs: ground colour black. Hairs on femora long and paler yellow than on the mesonotum.

♀: Head: ground colour black. Distribution of the hairs on the antennae identical as in male, except that there are also long yellow hairs on the dorsal part of the scape. No black hairs on frons, ocellar tubercle, and occiput.

Thorax: hairs yellow, no black hairs on mesopleurae.

Abdomen: hairs yellow, no black hairs on tergites t2 to t7.

Wing: identical as in male.

Legs: ground colour black. Hairs on femora long and paler yellow than on the mesonotum.

Diagnosis: The females of *Conophorus gracilis* sp. n. can easily be distinguished from those of the closely related *Conophorus nobilis* by their

slender proboscis and the lack of black hairs on the frons, whereas the frons of *C. nobilis* is always intermixed with some black hairs. The males can only be separated by the form of the proboscis. Their genitalia do not offer any reliable diagnostic characters.

Material examined:

Holotype: ♂, Turkey, Bayafşar, Konya, N 37°33'29.2" E 31°47'46.6", 1190 m, 20.05.2005, leg. Dils J. & Faes J., deposited in ZMAN, Zoological Museum of the Amsterdam University.

Paratypes: 80 specimens, 24♂ and 56♀: **Turkey**: 2♂, 3♀, İzmir, Yenibağarası, N 38°40'08" E 26°52'59", 30 m, 30.04.2001; 4♂, 5♀, Çanakale, Behram, N 39°30'22" E 26°19'52", 130 m, 02.05.2001; 6♂, 10♀, Bayafşar, Konya, N 37°33'29.2" E 31°47'46.6", 1190 m, 20.05.2005; 7♂, 17♀, Ermenek, Karaman, N 36°38'29.4" E 32°52'1.1", 1325 m, 23.05.2005; 3♂, 5♀, Erçiyas Geçidi, Kayseri, N 38°36'43.7" E 35°31'7.8", 1870 m, 04.07.2004; 1♂, 2♀, Muğla, Yerkesik, N 37°7'29" E 28°16'15", 670 m, 28.04.2001; 3♀, İzmir, Kavakdere, N 38°06'17" E 26°51'08", 0 m, 30.04.2001; 3♀, Muğla, Mumcular, N 37°02'46" E 27°42'04", 350 m, 29.04.2001; 2♀, Niğde, Elekölü, N 37°42'31" E 35°01'26", 1300 m, 14.06.1999; 3♀, Yelibeli Geçidi, Karaman, 36°49'49.5" E 32°56'34.4", 1925 m; 2♀, İçel, Maden, N 37°25'13.3" E 34°34'59.1", 2200 m; 1♂, Muğla, Alatepe, N37°04'00" E 28°07' 55", 680 m; all leg. Dils, J. & Faes, J.; **Greece**: 1♀, Lesvos, Skala Kallonis, 20.06.2000, leg. Van Steenis W. & Bakker E. S.; Paratypes have been deposited in the Atatürk University, Faculty of Agriculture, Department of Plant Protection, Erzurum, Entomology Museum (EMET), and in coll. J. Dils (Stabroek, Belgium).

Etymology: The species is named after the slender form of the proboscis.

Distribution: *Conophorus gracilis* sp. n. is currently only known from Turkey and the Greek island of Lesvos. *Conophorus nobilis* Loew, 1873 has been recorded from Armenia, Azerbaijan, Gruzia, Iran, Jordan (new record), Russia (SET), Turkey, and Turkmenistan.

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