# A new species of *Empis* (subgenus *Xanthempis*) from Italy (Diptera: Empididae)

## I.V. Shamshev

Shamshev, I.V. 2007. A new species of *Empis* (subgenus *Xanthempis*) from Italy (Diptera: Empididae). *Zoosystematica Rossica*, **16**(2): 281-283.

Empis (Xanthempis) siciliensis sp. n. is described from Italy (Sicily).

I.V. Shamshev, All-Russian Institute of Plant Protection, shosse Podbel'skogo 3, St. Petersburg-Pushkin, 188620, Russia. E-mail: shamshev@mail.ru

The subgenus *Xanthempis* Bezzi includes species of the genus *Empis* Linnaeus sharing the elongated posteriorly head, long scape of antenna, bilobed antepronotum, dichoptic eyes in both sexes and some other distinctive features. Currently, the group is only known from the Palaearctic and includes 51 species (Daugeron, 2000). In Italy, 11 species of the subgenus were recorded, however, the majority of them (10 species) have been found from northern regions of the country and only 1 species, from the peninsula (Pesarini et al., 1995). No species of *Xanthempis* have been found from the islands belonging to Italy, including Sicily.

This paper describes a new species of the subgenus *Xanthempis* from Sicily. The new species was found among Empididae material housed at the Zoological Museum of University Copenhagen, Denmark (ZMUC).

# **Empis (Xanthempis) siciliensis** sp. n. (see Figure)

Holotype. &, Italy, Sicily, Troina, Lago di Ancipa, 900 m, 3.V.1968, S. Langemark leg.; coll. ZMUC.

Diagnosis. Occiput entirely yellow; scutum with narrow, brownish vitta; anterior spiracle yellow; 1 postsutural supra-alar present; dorsocentrals partly biserial. Male: hypandrium with 2 spine-like, subapical setae; phallus long, thin, evenly curved, with long, beak-shaped apex.

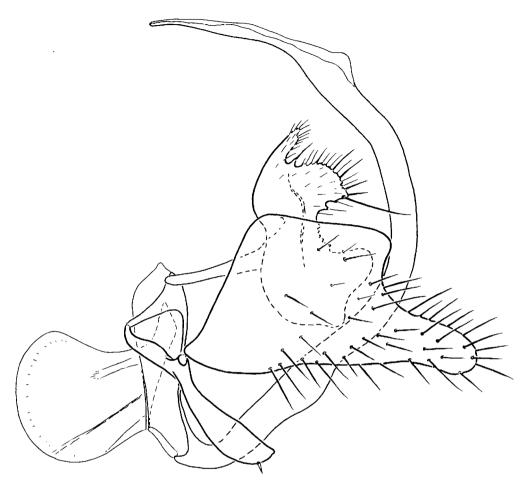
Description. Male. Face, frons and occiput entirely yellow, subshining, finely greyish pollinose. Ocellar tubercle brownish, with 2 short, thin setae. Occiput with 2 long setae in upper part and numerous setae arranged in two transverse, almost regular rows; upper row including minute postoculars. Antenna with scape and pedicel yellowish brown, postpedicel and stylus black. Scape about 4.0 times as long as wide; postpedicel

about 6.0 times as long as wide; stylus very short. Length of labrum about 2.0 times height of head. Palpus yellow, pale pubescent, with several thin, brownish setulae.

Thorax almost entirely yellow, only notopleural line blackish, with black setation. Scutum viewed dorsally matt, with indistinct, brownish, narrow, median vitta on presutural area. Prosternum bare. Proepisternum with several minute setulae on lower portion and 3 similar setulae on upper portion. Antepronotum bilobed, with 7-8 moderately long setae on each side. Postpronotal lobe with 1 long and several short setae. Mesonotum with 1 presutural intra-alar, 1 presutural supra-alar, 2 notopleurals (anterior one longer), 1 postsutural supra-alar (with 5 additional setulae), 1 postalar (with 1 minute setula), 2 scutellars; additionally, notopleural depression with several setulae anteriorly; acrostichals lacking; dorsocentrals mostly uniserial, arranged in 2 irregular rows on middle part of scutum, subequally short and thin (including prescutellars), numerous. Laterotergite with several setae of different lengths. Anterior and posterior spiracles yellow.

Legs long, slender, largely yellow; tarsi brownish yellow, with tarsomeres 4-5 darker. Fore femur pale pubescent ventrally. Fore tibia with 3-4 short dorsal setae on middle part (number and position varying on right and left tibiae). Middle and hind femora covered with dense minute setulae ventrally. Middle and hind tibiae lacking prominent setae (except circlet of subapicals). Tarsi unmodified.

Wing hyaline. Veins brownish yellow, complete (except *Sc*), well sclerotised. One short costal bristle. Stigma indistinct, brownish yellow. Anal lobe obtuse. Squama yellow, dark fringed. Halter yellow.



Empis (Xanthempis) siciliensis sp. n., male, holotype, terminalia viewed laterally.

Abdomen yellowish, viewed dorsally subshining, finely greyish pollinose, covered with mostly short black setae; tergites 1-3 and segment 8 bearing longer posteromarginals. Segment 8 with tergite and sternite entirely fused.

Terminalia largely yellow, with black setation; cercus brownish along upper margin. Cercus with rather deep posteromarginal excision; upper projection digitiform, short; lower projection broad, short, with 1 long and numerous short marginal setae. Epandrial lamella trapezoid, with lower margin strongly produced posteriorly, covered with numerous setae of different lengths. Hypandrium with 2 short, spine-like, subapical setae. Phallus long, thin, evenly curved, slightly thickened near base, with long, narrow, beak-shaped apex.

Length: wing 7.4 mm.

Female. Unknown.

Differential diagnosis. The new species is closely related to E. matilei Daugeron & Char-

bonnel described from Italian Alps (Daugeron & Charbonnel, 2000). Both species possess a narrow scutal vitta, a postsutural supra-alar seta, additional dorsocentral setae (in *E. matilei* in the female only) and similar shape of the epandrial lamella. However, in *E. matilei* the occiput has a triangular dark spot, the antenna is entirely black, the dorsocentral setae are uniserial throughout, the phallus is truncate at the apex and the hypandrium is bare.

Additionally, *E. siciliensis* sp. n. could be compared with *E. lutea* Meigen, *E. albifrons* Bezzi, *E. rohaceki* Chvála and *E. montivaga* Daugeron, which are known from Europe. However, all these species primarily differ from the new species in their entirely yellow scutum (Chvála, 1994; Daugeron, 2000).

*Etymology*. The new species is named after its type locality.

*Distribution*. Europe: Italy (Sicily).

#### Acknowledgements

I am indebted to Thomas Pape (Copenhagen) for his help during my work at Zoological Museum of University Copenhagen. My visit to Copenhagen was supported by the Sweden Institute.

## References

Chvála, M. 1994. The Empidoidea (Diptera) of Fennoscandia and Denmark. III. Genus Empis. Fauna Entomologica Scandinavica, 29: 1-192.

- **Daugeron, C.** 2000. The subgenus *Xanthempis*: new species and taxonomical data (Diptera: Empididae). *Ann. Soc. Entomol. France* (N.S.), **36**(4): 371-388.
- Daugeron, C. & Charbonnel, J. 2000. Empis matilei, a new species of the subgenus Xanthempis from Italy (Diptera, Empididae). Rev. Franç. Entomol. (N.S.), 22: 139-141.
- Pesarini, F., Raffone, G. & Wagner, R. 1995. Diptera Empidoidea. *In*: Minelli, A., Ruffo, S. & La Posta, S. (eds.). *Checklist delle specie della fauna italiana*, **69**: 1-23. Calderini, Bologna.

Received 12 October 2007