

# Notes on *Cytherea pallidipennis* (Diptera: Bombyliidae)

J. Dils & H. Özbek

**Abstract.** *Cytherea pallidipennis* (Abbassian-Lintzen, 1968) was hitherto only known from Iran. It is mentioned here for the first time from Turkey and Israel. A more detailed description is given.

**Samenvatting.** Gegevens over *Cytherea pallidipennis* (Diptera: Bombyliidae) *Cytherea pallidipennis* (Abbassian-Lintzen, 1968) was tot nu toe enkel bekend uit Iran. De soort wordt hier voor het eerst uit Turkije en Israël vermeld. Een meer gedetailleerde beschrijving wordt gegeven.

**Résumé.** Quelques données sur *Cytherea pallidipennis* (Diptera: Bombyliidae) *Cytherea pallidipennis* (Abbassian-Lintzen, 1968) était connu seulement d'Iran. L'espèce est mentionnée ici pour la première fois de Turquie et d'Israël. Une description plus détaillée est donnée.

**Key words:** *Cytherea pallidipennis* – *Cytherea innitidifrons* – Bombyliidae – distribution – Turkey – Israel – Iran.

Dils, Dr. J.: Krekelberg 149, B-2940 Hoevenen, Belgium. jos.dils@pandora.be

Özbek, Prof. Dr. H.: Plant Protection Department, College of Agriculture, Atatürk University, TR-25240 Erzurum, Turkey. hozbek@atauni.edu.tr

## Introduction

*Chalcochiton pallidipennis* Abbassian-Lintzen, 1968 was described from a single female and a single male, and was until now only known from Iran. Here we examine ten males and three females of this bee fly from three countries in Asia Minor (Iran, Turkey and Israel). An additional description is given. The Turkish males were the only ones collected in association with females, although unfortunately, not in copula. The male of this species is most readily distinguished from its congeners by the deep-black dull ground colour of the mesonotum.

In the same paper Abbassian-Lintzen described a second *Chalcochiton* species, *Chalcochiton innitidifrons*, from a single female that seems to be closely related to *C. pallidipennis*. This female differs mainly from *C. pallidipennis* in having a dull frons and black hairs on the anepisternum. Both *C. pallidipennis* and *C. innitidifrons* belong to the genus *Cytherea*.

## *Cytherea pallidipennis* (Abbassian-Lintzen, 1968)

### Material examined:

**Turkey** (new record): 1♂ + 1♀, Hakkari, Suvarihalil pass, 2021 m, N37°29'49.7" E43°20'30.0", 17-06-2005, leg. Dils-Faes (J. D. personal collection); 2♂ + 2♀ Turkey, Bingöl, Bilaoğlu, 1300 m, N38°55'47.1" E40°20'58.0", 13-06-2005, leg. Dils-Faes (J. D. personal collection).

**Israel** (new record): 1♂, South district Mikhrot, Timna 23 km N Elat, Har Timna, Negev 29.45N 34.59E, 10-03-1995, leg. C. Lange & J. Ziegler (in ZMHB, Berlin).

**Iran:** 6♂, Čerum, 100 km NNE Bouchir, 26-03-1937, leg. Brandt (in KBIN, Brussels).

**Description:**

Male: (figs. 2, 3)

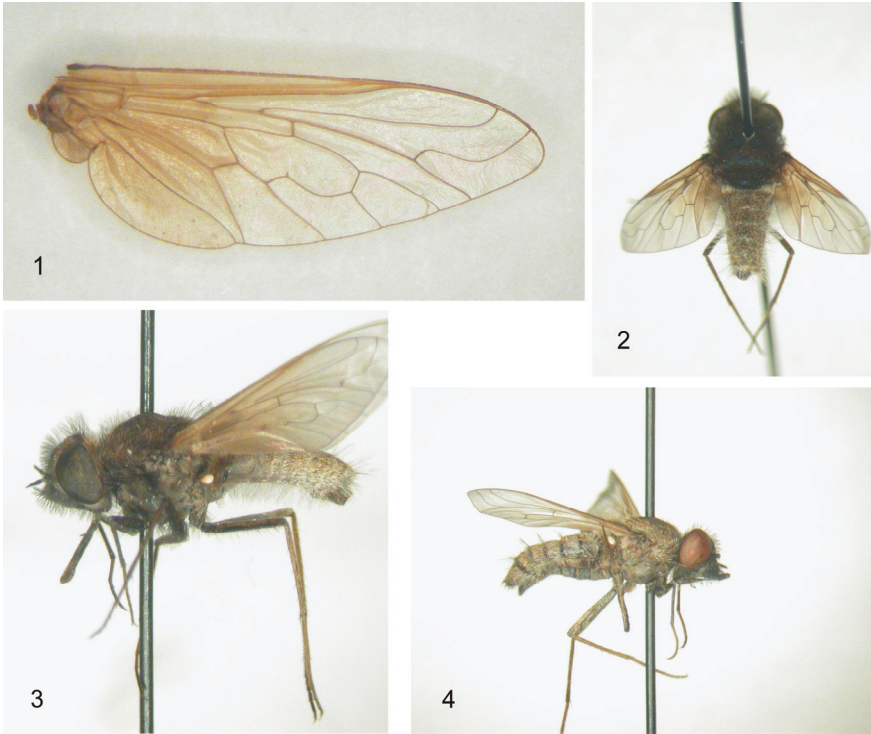
**Head:** Ground colour black, genae separated from bucal cavity and face by a deep groove, all hairs black except on occiput which has an admixture of reddish-yellow hairs, no hairs between the antenna only scattered very fine reddish-yellow scales as on frons and face. Black hairs, on ocellar tubercle as long as the conical flagellum, those on frons becoming gradually shorter towards the antennae. Grey dusting around antenna, genae, face and mentum. Antenna black, scape and pedicel dusted grey, black hairs on scape only. Proportion: flagellum / (scape + pedicel) equals 24/10. The proboscis slightly protrudes beyond the bucal cavity, palpa 1/3 the length of the proboscis with long brownish hairs. Ratio head / frons 3.1.

**Thorax:** Mesonotum and scutellum dull black in ground colour with mauve dusting. When viewed from the front, two undusted black lines with a narrow mauve central line can be seen on the front of the mesonotum, ending well before the scutellum. Hairs black, those of the scutellum the longest with a shorter vestiture of sparse, scattered, very fine reddish-yellow hairs. Anepisternum with black hairs as long as on scutellum and anepimeron with a few black shorter ones. Other pleural sclerites bare.

**Legs:** Black coxae with black and reddish hairs. Femora black, tibia and tarsi brown. Femora with whitish scales and fine black hairs, 2 or 3 black bristles near apex. Tibia brown with yellowish scales, black spines, pulvilli half the length of the claws, tarsi brown, 4<sup>th</sup> and 5<sup>th</sup> metatarsi darkened.

**Abdomen:** Ground colour brown, tergites with white hairs, those on the posterior edge from T2 to T7 and the dorsum of T2 to T4 as long as the antenna. Hairs on the side of T1 have a yellowish base and an admixture of a few brown hairs. In some specimens the vestiture on T5 and T6 can include a few brown hairs. T2 to T7 covered with a mixture of fine elongated light-brown and yellowish scales. The fine yellowish scales are somewhat more densely distributed near the posterior edges of the tergites, giving an impression of lighter coloured apical bands. Sternites with the same ground colour as the tergites but with yellow posterior margins and scarcely covered with white scales and white hairs.

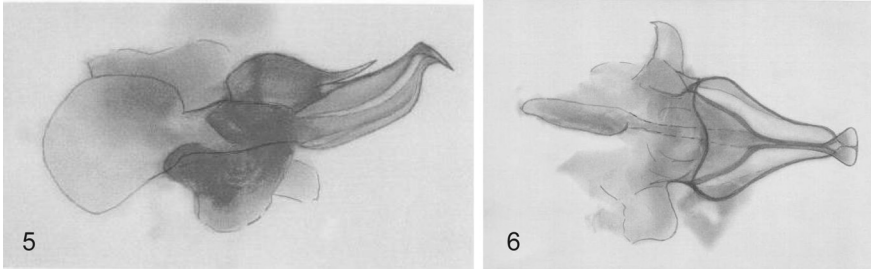
**Wings (fig. 1):** The wings are nearly completely transparent, with the following areas a light tan colour: costal cell, first basal, second basal and anal cell and part of the axillary cell. The infuscation is not sharply defined. The vein, separating the discal cell from third posterior, nearly always with a small appendix. Halteres with brown stem and ivory knob.



Figs. 1–4. *Cytherea pallidipennis* Abbassian-Lintzen, 1968. 1.– Right wing, Iran, Čerum, 100 km NNE Bouchir, 26.iii.1937, leg. Brandt; 2.– Male, dorsal view, Turkey, Bingöl, Bilaoğlu, 1300 m, 13.vi.2005, leg. Dils-Faes; 3.– Male, lateral view, idem; 4.– Female, lateral view, idem.

Genitalia (figs. 5–6): Tip of epiphallus smooth, not dented as in the other *Cytherea* species.

Female (fig. 4): The female differs from the male mainly in the wider separation of the eyes (Ratio head / frons 2.32), in a lighter infuscation of the wings, yellowish hairs on anepisternum and scutellum, and in the addition of black hairs (setae) on the posterior margins of tergites 4 to 7 (Holotype 2 to 7). The white hairs on the posterior margins of the tergites are shorter than those of the males. The ground colour of the mesonotum is not black but brownish and there is no mauve dusting as in the male.



Figs.5–6. *Cytherea pallidipennis* Abbassian-Lintzen, 1968. 5.– Lateral view of epiphallus, Iran, Čerum, 100 km NNE Bouchir, 26.iii.1937, leg. Brandt; 6.– Dorsal view of epiphallus, idem.

### Acknowledgment

We wish to thank Dr. J. Ziegler from the ZMHB (Berlin) and Dr. P. Grootaert from the KBIN (Brussels) for the loan of the necessary material.

### Literature

- Abbassian-Lintzen, R. 1968. Bombyliidae (Diptera) of Iran. IV Species of the subfamily Cythereinae. — *Journal of Natural History* 2: 231–238.
- Austen, E. E. 1937. *The Bombyliidae of Palestine*. — British Museum (Natural History), London. ix + 188 pp.
- Engel, E. O. 1932. Bombyliidae. — In Lindner, E. (ed.) *Die Fliegen der palaearktischen Region*. 619 pp., 239 figs., 15 pls., E. Schweizerbart, Stuttgart.
- Becker, Th. 1903a. Die Paläarktische Formen der Gattung *Mulio* Latreille (Dipt.). — *Z. Syst. Hymen. Dipt.* 3: 17–32.
- Becker, Th. 1903b. Die Paläarktische Formen der Gattung *Mulio* Latreille (Dipt.). — *Z. Syst. Hymen. Dipt.* 3: 89–96.
- Becker, Th. 1903c. Die Paläarktische Formen der Gattung *Mulio* Latreille (Dipt.). — *Z. Syst. Hymen. Dipt.* 3: 193–198.
- Paramonow, S. J. 1930. Beiträge zur Monographie der Bombyliiden-Gattungen *Cytherea*, *Anastoechus* etc. Bombyliidae [Diptera]. — *Zbirnyk Prats Zoolohichnoho Muzeyu* 9: 1–133.