

## ***Paraplatypeza bicincta* (Szilady, 1941) (Diptera: Platypezidae) new to Belgium**

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### **Abstract**

The flat-footed fly *Paraplatypeza bicincta* (Szilady, 1941) is reported for the first time from Belgium. Details on the localities and ecology are given.

**Keywords:** Belgium, new record, *Paraplatypeza bicincta*, Platypezidae

### **Résumé**

*Paraplatypeza bicincta* (Szilady, 1941), une « mouche aux pieds plats », est mentionnée pour la première fois en Belgique. Les caractéristiques des localités et écologiques sont données.

### **Samenvatting**

De breedvoetvlieg *Paraplatypeza bicincta* (Szilady, 1941) wordt voor het eerst vermeld voor België. Details over de lokaliteiten en ecologie worden besproken.

### **Introduction**

Platypezidae is a rather small family of little flies in Belgium and they are often neglected. They are called ‘flat-footed flies’ because they have widened hind tarsi, a characteristic that is particularly striking in the females. As far as is currently known, the larvae of all flat-footed flies feed on mushrooms (CHANDLER, 2001). These small flies are especially noticeable because they run around nervously on the top of the leaves of deciduous trees and shrubs. Typically, they alternate short runs with sharp turns. Sometimes they sit still for a second and then they fly quickly to another leaf. They can easily be confused with humpbacked flies (Phoridae), which can walk on leaves in the same way. However, unlike flat-footed flies, these have a smaller head and different venation in the wings (REEMER & DE JONG, 2016).

The genus *Paraplatypeza* consists of small-built flies with the typical, widened hind tarsi. The presence of bristles on the face of *Paraplatypeza* distinguishes this genus from species belonging to the genera *Bolopus*, *Kesselimyia*, *Lindneromyia*, *Polyporivora* and *Seri* (REEMER & DE JONG, 2016). Further *Paraplatypeza* can be distinguished from *Protoctylthia* by the shortened first tarsal segment on the hind leg. A distinction with *Platypeza* can be made through a different wing venation, vein r-m being placed at the height of 0.5–0.65 of the length of the cell c (REEMER & DE JONG, 2016).

There are only two species of *Paraplatypeza* in Europe: *P. bicincta* and *P. atra* (Meigen, 1804) (DE JONG *et al.*, 2014). With the discovery of *P. bicincta*, both existing European species within this genus are now known from Belgium (GROOTAERT *et al.*, 1991).



Fig. 1. Female of *Paraplatypeza bicincta* in Gooik, Kesterheide, dorsal view. © Lieven Decrick.

Many flat-footed flies have fairly inconspicuous, black-coloured males and rather strikingly marked females, sometimes with bright colours. In *P. bicincta* the female is also much more striking than the male. The female's thorax is dusted grey with three black transverse bands, the middle one being the widest (see Figs 1–3). The abdomen is marked with light gray spotted pairs, resembling *Polyporivora* females. However, the completely gray dusted tergite VI of *Paraplatypeza* is black in *Polyporivora*. The males are completely dull black and can easily be confused with the males of *Paraplatypeza atra*, *Platypeza*, and *Kesselimyia*.

*Paraplatypeza bicincta* lives in forests where the host fungus *Pluteus cervinus*, often called ‘the deer mushroom’, occurs. This species is also the host fungus for the more common distributed *P. atra*. The flight time of *P. bicincta* is between mid-September and the end of October, when fruitbodies of the host fungi are also common (REEMER & DE JONG, 2016).

### Material and methods

Specimens were observed during entomological excursions. Two specimens were photographed and posted on <https://waarnemingen.be>. One specimen was collected and dry mounted on pin. Identification was done following REEMER & DE JONG (2016).

### Results

#### *Paraplatypeza bicincta* new record

(Figs 1–3)

MATERIAL EXAMINED: BELGIUM: • 1♀, Nijlen, Kleine Netevallei, 07.x.2020, leg. Veraghtert W., col: private collection Veraghtert W. (<https://waarnemingen.be/observation/201556464/>); • 1♀, Gooik, Kesterheide, 12.x.2020, leg. Decrick L. (<https://waarnemingen.be/observation/201549975/>) (Figs 1–3); • 1♀, Destelbergen, Eenbeekeinde, 15.x.2020, picture Vantieghem P. (<https://waarnemingen.be/observation/201692989/>); • 1♀, De Pinte, 20.x.2020, on *Buddleja*

*globosa* × *dauidii*, picture Van den Bremt P. (<https://waarnemingen.be/observation/201980710/>).

During a visit to the nature reserve 'Kesterheide' on October 12, 2020 a stand of *Fallopia japonica* in a forest edge was discovered. It is known that large, matted leaves of this plant can be of interest to *Platypezidae*. This turned out to be the case, because *Paraplatypeza bicincta* was found among four other *Platypezidae*. The observation of this species was posted on the website [www.waarnemingen.be](http://www.waarnemingen.be) which led later on to other posts of observations. In the same autumn, three other observations were made. One of these observations was made five days earlier than the record in Kesterheide, in the Kleine Netevallei by Wim Veraghtert. A few days later two other females of *P. bicincta* were seen in Oost-Vlaanderen. The first one on October 15 by Pieter Vantieghem in Eenbeekeinde at Destelbergen. The last one was seen by Paul Van den Bremt at De Pinte on October 20.



Fig. 2. Female of *Paraplatypeza bicincta* in Gooik, Kesterheide, dorso-lateral view. © Lieven Decrick.

### Discussion

The discovery of *P. bicincta* in Belgium was expected. REEMER & DE JONG (2016) mention the species as "fairly common and widespread in the Netherlands". They also suspect that the distribution area of this species increased since 1990. This is also evident from observations of neighboring countries (DE JONG *et al.*, 2014). SCHACHT (2006) listed the species as "new to Germany". In 2013 it was found in northwest Germany (CLAUSSEN, 2013). In Great Britain it was reported as early as 2002 by CHANDLER (2002). The fact that *P. bicincta* has not been observed in Belgium before is linked to the neglect of the relatively unknown *Platypezidae* among entomologists. Hence the species might have arrived in Belgium a few years or decades ago. There is a very good chance that this beautiful *Platypezidae* will be observed even more in the coming years.





Fig. 3. Female of *Paraplatypeza bicincta* in Gooik, Kesterheide, in resting position. © Lieven Decrick.

#### Acknowledgements

We would like to thank Wim Veraghtert, Pieter Vantiegheem and Paul Van den Bremt for the information about their records of *Paraplatypeza bicincta*. We also want to thank Patrick Grootaert for his comments on an earlier version of the manuscript.

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