

Symphorobius (*Niremberge*) *klapaleki* Zeleny, 1963 new to Belgium (Neuroptera: Hemerobiidae)

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Abstract

During an inventory of the Balimheide in Lommel on 3.VII.2017, *Symphorobius* (*Niremberge*) *klapaleki* Zeleny, 1963 was observed for the first time in Belgium. One male was found on pedunculate oak by sweeping sun-exposed branches.

Keywords: Balimheide, Hemerobiidae, Neuroptera, *Symphorobius* (*Niremberge*) *klapaleki*

Samenvatting

Tijdens een inventarisatie van de Balimheide in Lommel op 3.VII.2017 werd *Symphorobius* (*Niremberge*) *klapaleki* Zeleny, 1963 voor het eerst waargenomen in België. Eén mannetje werd gevonden op Zomereik door het slepen van zonbeschenen takken.

Résumé

Lors de l'inventaire de la Balimheide à Lommel le 3.VII.2017, *Symphorobius* (*Niremberge*) *klapaleki* Zeleny, 1963 a été observé pour la première fois en Belgique. Un mâle a été trouvé sur Chêne pédonculé en fauchant les branches exposées au soleil.

Introduction

Hemerobiidae (brown lacewings) resemble the better known Chrysopidae (green lacewings), however, they are usually smaller (3-16 mm) and brown rather than green. Hemerobiidae can also be recognised by the costal cross-veins in the forewing that usually fork before reaching the front margin and in addition, a recurrent vein can be present. They mainly feed on aphids and scale insects and can be important predators of harmful insects. Brown lacewings can be collected by sweeping and beating the vegetation, especially sun-exposed branches, but they also come to light traps. Recently, *Psectra diptera* (Burmeister, 1839), *Wesmaelius* (*Wesmaelius*) *quadrifasciatus* (Reuter, 1894) and *Hemerobius* (*Hemerobius*) *fenestratus* Tjeder, 1932 could already be added to the Belgian fauna (LOCK & SAN MARTIN, 2013; MOUCHERON, 2016) and here, *Symphorobius* (*Niremberge*) *klapaleki* Zeleny, 1963 is reported for the first time for Belgium.

Material and methods

During an inventory of the Balimheide (formerly known as Kristalpark) in Lommel (Province of Limburg, UTM: 31UFS5974, 45 m a.s.l.), Neuroptera and other insects were sampled by sweeping the vegetation. One male of *Symphorobius* (*Niremberge*) *klapaleki* Zeleny, 1963 was captured, which was deposited to the entomological collection of the Royal Belgian Institute of Natural Sciences (I.G.: 33.649).



Fig. 1. Habitus of *Sympherobius (Niremberge) klapaleki* Zeleny, 1963 (photo: Koen Lock).



Fig. 2. Right forewing of *Sympherobius (Niremberge) klapaleki* Zeleny, 1963 (photo: Koen Lock).



Fig. 3. Lateral view of the ectoproct of *Sympherobius (Niremberge) klapaleki* Zeleny, 1963 (photo: Koen Lock).

The Belgian Hemerobiidae can all be identified with the books of ASPÖCK *et al.* (1980a,b), which contain all the species occurring in Europe. The much cheaper identification key of PLANT (1997) contains most species that have been reported in Belgium, however, *S. klapaleki* is only treated in a note and the male genitalia are shown in Fig. 140 and not Fig. 142, which is wrongly mentioned in the note. In addition, *Megalomus tortricoides* Rambur, 1842, which also occurs in Belgium, is not treated and would key out as *Megalomus hirtus* (Linnaeus, 1761).

Results

On 3.VII.2017, one male of *Sympherobius (Niremberge) klapaleki* Zeleny, 1963 (Fig. 1) was observed in the Balimheide in Lommel on a sun-exposed Pedunculate oak (*Quercus robur*). At the same location, also the green lacewings *Chrysopa perla* (Linnaeus, 1758), *Pseudomallada prasinus* (Burmeister, 1839) and *Chrysopidia ciliata* (Wesmael, 18441) and the brown lacewing *Hemerobius (Hemerobius) stigma* Stephens, 1836 were found.

In the subgenus *Niremberge*, the radial vein of the forewing has three branches (Fig. 2), while only two branches are present in the subgenus *Hemerobius*. The forewing of *S. klapaleki* has distinct darkening around the cross-veins (Fig. 2), just like in *Sympherobius (Niremberge) pellucidus* (Walker, 1853), while *Sympherobius (Niremberge) fuscescens* (Wallengren, 1863) has no darkening around the cross-veins. *S. klapaleki* can be easily recognised from the other *Sympherobius* species by the pale two first antennal segments (scape and pedicel) (Fig. 1). Males can also be recognised by shape of the ectoproct (Fig. 3).

Discussion

Symphorobius klapaleki is a thermophilous species that is usually found in low densities on oak ASPÖCK *et al.* (1980a). The species was expected in Belgium (LOCK & SAN MARTIN, 2013), because it was already observed in the Netherlands (HOGENES, personal communication), the German federal state Nordrhein-Westfalen bordering Belgium (SAURE, 2001), France (ASPÖCK *et al.*, 2001) and Britain (WHITTINGTON, 1998).

The Balimheide is a very valuable, but vulnerable dry heath land with a lot of flowers and patches of bare sand, which Natuurpunt recently bought, but for financing this project 180.000 € is still needed, which is currently gathered through crowd funding (MOEREMANS & LAMBRECHTS, 2017). The area will form a green buffer of 48 hectares around an industrial area, including a sun park with 300.000 solar panels, where measures will also be taken to protect the natural value. The area contains the largest population of the Ladybird spider *Eresus sandaliatus* (Martini & Goeze, 1778) in the world and also important populations of, amongst others, the Smooth snake *Coronella austriaca* Laurenti, 1768, the Silver-spotted skipper *Hesperia comma* Linnaeus, 1758 and the Grayling *Hipparchia Semele* Linnaeus, 1758.

Acknowledgements

I visited the Balimheide because Koen Van Keer invited me to make an inventory of this threatened heath land in order to motivate the protection of this area. In the meantime, Natuurpunt signed a charter with the city of Lommel and the Limburgse Reconversie maatschappij and the most valuable 48 hectares will become a green buffer.

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