

Diplopseustis perieresalis, a tropical species, new to the Belgian fauna (Lepidoptera: Crambidae)

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Samenvatting. *Diplopseustis perieresalis*, een tropische soort, nieuw voor de Belgische fauna (Lepidoptera: Crambidae)

De exotische soort *Diplopseustis perieresalis* (Walker, 1859), die oorspronkelijk voorkomt in Azië en Australië, is nu ook voor het eerst in België aangetroffen. Op 13 augustus 2007 werd het exemplaar gevonden in Wielsbeke (België, provincie West-Vlaanderen).

Résumé. *Diplopseustis perieresalis*, une espèce tropicale, nouvelle pour la faune belge (Lepidoptera: Crambidae)

Diplopseustis perieresalis (Walker, 1859), une espèce exotique originaire de l'Asie et d'Australie, a été trouvé pour la première fois en Belgique. Le 13 août 2007 un exemplaire fut trouvé à Wielsbeke (Belgique, province de West-Vlaanderen).

Key words : *Diplopseustis perieresalis* – Belgium – faunistics – first record – exotic.

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Introduction

Europe is experiencing rapid changes in the last decade. New Microlepidoptera species are being recorded for Europe, and within Europe a number of species are expanding their range impressively. Also within the Benelux, there are many examples of Microlepidoptera species which were previously unknown in the Benelux but which are now considered common species.



Fig. 1–2. *Diplopseustis perieresalis* (Walker, 1859), Belgium, Province of West-Vlaanderen, Wielsbeke, 13.VIII.2007. 1.– the specimen feeding on old apples; 2.– Adult (same). (leg. & photo S. Wullaert).

One of the most well-known examples which are often mentioned, is the invasion of the small leafminer *Cameraria ohridella* (Deschka & Dimić). This species was first recorded in Macedonia in 1985. Only some years later, in 1999, the species was also found in Belgium (Simova-Tošić & Filov 1985, De Prins &

Puplesiene 1999) and it is now considered a plague on chestnut trees across Belgium. If we take a look at the larger Microlepidoptera, there are some species expanding their range as well. For example, *Antigastra catalaunalis* (Duponchel) has unexpectedly been reported in several places in Belgium (De Prins & Veraghtert 2006). It is a more tropical species which extends into the southern part of Europe (Goater 1986). In the next decades, more of those rapid changes are well to be expected, with climate changes as imaginable cause.

A newcomer in the West-Palaearctic region is the exotic pyralid moth from the family of the Crambidae (Spilomelinae), *Diplopseustis perieresalis* (Walker, 1859). The first record of this species in Europe originated from Portugal, after that the species has expanded its range (Spreidel *et al.* 2007) across Europe. One can question if the species has expanded its range by itself, or if it is an adventive species, for example, being imported by foreign transport.

Considering the first reports from The Netherlands, the species could be found in Belgium as well, and finally, on 13 August 2007 the first specimen was recorded at Wielsbeke by Steve Wullaert. With this record, the species has reached, once again, a new country on the European continent.

***Diplopseustis perieresalis* (Walker, 1859)**

This crambid strongly resembles specimens of *Endotricha flammealis* (Linnaeus), meal moths from the genus *Pyralis* or even the choreutid *Anthophila fabriciana* (Linnaeus). A significant difference between the fore mentioned species are the outstanding long labial palpi of *D. perieresalis*.

The moth was first recorded in Europe in 2000 and has subsequently been found in several localities throughout Europe (Spreidel *et al.* 2007). The species might be established after its initial introduction, because of the presence of its supposed hostplant *Carex* in many places (Patrick 1994). If we take a closer look at the localities where the first specimens in The Netherlands and Belgium are caught, the habitat is quite the same, both near a waterway with industries and places with agriculture.

The first Belgian specimen was caught on 13 August 2007 in a natural garden at Wielsbeke (province of West-Vlaanderen) by the second author, and identified by the first author from a picture (fig. 1). The garden is situated in a rather spatial laid environment in the countryside near the river Leie, with some small industries. The moths obviously come to sugar.

Morphology

Following description is based on the external morphology.

Male. Antennae on the outside with a broader structure.

Female. The abdomen is broader from segment 3 till 7, antennae are narrower compared to the antennae in the males, but the difference can sometimes be inferior.

General description. Wingspan 12–14 mm. The forewing is slender with the end of the wing more bending. In resting position it leads to a wavy appearance. Ground colour yellowish brown to darker red brown, Meyrick (1912) also

mentioned some variation in colour. Against the termen the interneural dots are present, with a more white edge. Fringe black to grey. More remarkable are the white dots at the costa. Hindwings ground colour mainly smooth white with the discal spot present, and a prominent darker area on the underside.

Biology

The early stages and the biology of the species is unknown so far (Speidel *et al.* 2007), but the supposed hostplant is *Carex*. Patrick (1994) defined that this species utilises some part of *C. secta*, because adults were seen at night flying around or near these plants.

Distribution

In Europe also records from Portugal, Spain, Canary Islands, The Netherlands (Speidel *et al.* 2007), England (The Scilly Isles, after Mackay & Fray 2002). The original distribution is situated in East Asia: Borneo, Indonesia, Malaysia, Brunei and Australia, principally East-Australia (Meyrick 1912).

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