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Occurrence of *Novotinea reinhardella* Nel, 2014 in Hungary (Lepidoptera: Tineidae)

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Abstract – The genus *Novotinea* Amsel, 1938 and the species *Novotinea reinhardella* Nel, 2014 (Lepidoptera: Tineidae) are reported for the first time from Hungary.

Key words – introduced species, life history, new record, palm

INTRODUCTION

Novotinea Amsel, 1938 (Lepidoptera: Tineidae) is a genus of Western Palaearctic moths, represented by nine species in Europe and one further species in Asia Minor (Rennwald & Rodeland 2026). Most of them are distributed exclusively in the Mediterranean basin; the diversity hotspot of the genus is apparently the Western Mediterranean (Gaedike 2015). To date, the genus has not been reported from Central Europe (including Hungary).

Novotinea reinhardella Nel, 2014 was discovered quite recently in Southern France (Nel 2014). Subsequently, it was reported from Spain, the Canary Islands (Gaedike 2015), and Egypt (Gaedike 2019). Only a few adult specimens were observed, the immature stages have remained unknown, and, apart from the collecting dates and habitats, no information have been published on its bionomics. The aim of this article is to present the first records of the genus *Novotinea* and the species *Novotinea reinhardella* from Hungary.

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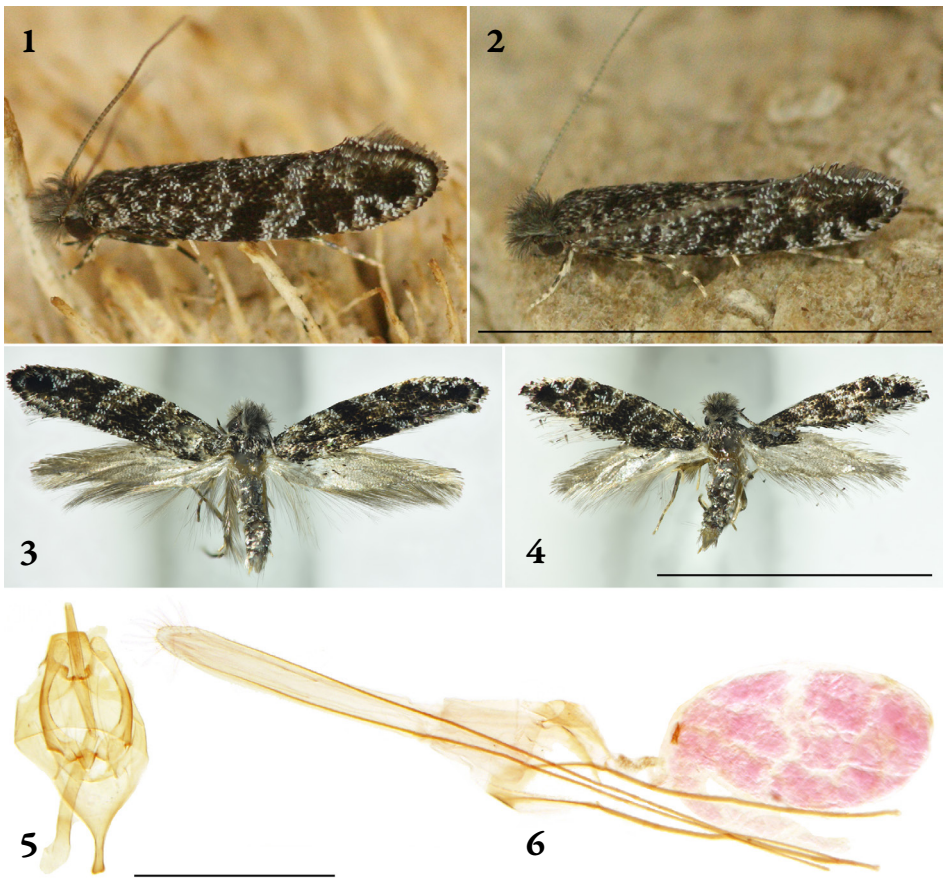
RESULTS

Novotinea reinhardella Nel, 2014
(Figs 1–6)

Material examined – Hungary, Budapest, 14th district, Budapest Zoo and Botanical Garden, Biodome, on *Phoenix canariensis* H. Wildpret (Arecaceae), 28.III.2025, leg. A. Benyó, 44 specimens, slide Nos TB2446m, TB2447f; all voucher specimens are deposited in the Lepidoptera Collection of the Hungarian National Museum Public Collection Centre – Hungarian Natural History Museum, Budapest (HNHM).



Figs 1–6. *Novotinea reinhardella* Nel, 2014 in Hungary, 1–2 = live adults on *Phoenix canariensis* trunk, scale bar = 5 mm, 3–4 = specimens in dorsal habitus, scale bar = 5 mm, 5 = male genitalia, slide No. TB2446m, 6 = female genitalia, slide No. TB2447f, scale bar to Figs 5–6 = 0.5 mm (photos by András Benyó (Figs 1–2) and Balázs Tóth (Figs 3–6))

Remarks – The species was previously known from only a few specimens, collected in early April and early August (Gaedike 2015). The first large series of specimens reported here multiplies the number of known adults. The examined material did not exhibit significant intraspecific variability in respect of their body, size external morphology, colouration and pattern. The citizen science webpage iNaturalist records an observation from February and another one from June**; no further details of its life history are known. We speculate that this moth species was introduced to Hungary together with *Phoenix canariensis* palms in October 2021. If this assumption is true, *Novotinea reinhardella* would be the second moth species to be introduced to our country with palms, besides *Paysandisia archon* (Burmeister, 1879) (Castniidae) reported by Sáfián *et al.* (2023). Although we do not expect it to cause significant damage or reach pest status, hereby we call the attention of zoo, botanical garden and horticulture centre staffs who deal with palm species, and encourage them to search for *Novotinea reinhardella* within their facilities. Proposed Hungarian name: "Reinhard-moly".

Distribution – *Novotinea reinhardella* has been observed in the Canary Islands, Spain (mainland), southern France and Egypt (Gaedike 2019). The indoor occurrence reported here represents the northernmost record of the species, and the first documented occurrence outside the Mediterranean region.

Bionomy – The type specimens of the species were attracted to light in a suburban area of the village La Ciotat (France) in early August (Nel 2014). The author emphasised the presence of several microhabitat types in the vicinity, including old walls with lichens. In Egypt the species was found in a district of Cairo with much green space (Gaedike 2019) and in a resort area at the Red Sea coast according to iNaturalist***. The collecting site in Hungary, the "Biodome" is a huge building under construction, to be inhabited by several plants and animals, as it will be an attraction of the Budapest Zoo and Botanical Garden. Here, numerous adults were observed in the daytime, swarming around and crawling on trunks of *Phoenix canariensis*. Their flight was slow; the moths were easily caught with jars or vials. Despite our efforts no egg deposition was observed and no immature stages were recorded, but a dead specimen in a spider web was found on 6.I.2026. Live adults have been observed from 21.III.2025 (Figs 1–2). Few information is available on the hosts of the larvae of *Novotinea* species; these include wall lichens (*Novotinea muricolella* (Fuchs, 1879)) or green algae on rocks (*Novotinea andalusiella* Petersen, 1964) (Gaedike 2015). We think that larvae of *Novotinea reinhardella* feed either in the bark of palm trees or in detritus deployed on their trunks or lichens or algae growing on the bark.

Identification – The species was identified by external appearance supported by genitalia dissection. Fresh adult specimens can be distinguished by the greyish ground colour with bluish tinge and the broad black bands of the forewing (microscope or at least a good loupe is needed). Worn specimens are to

** https://www.inaturalist.org/observations?verifiable=true&taxon_id=1322354

*** https://www.inaturalist.org/observations/8681666

be dissected. The diagnostic characters of the male genitalia are the truncated or slightly bilobed uncus and the elongated, sickle-shaped valvae; those of the female genitalia include the patch of spines at the anterior end of corpus bursae, and a longitudinal band of thin spines in corpus bursae.

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REFERENCES

Gaedike R. 2015: Tineidae I (Dryadaulinae, Hapsiferinae, Euplocaminae, Scardiinae, Nematopogoninae and Meessiinae). – In: Nuss M., Karsholt O. & Huemer P. (eds): *Microlepidoptera of Europe 7*. Brill, Leiden, Boston, pp. 1–308. https://doi.org/10.1163/9789004289161_002

Gaedike R. 2019: Tineidae II (Myrmecozelinae, Perissomasticinae, Tineinae, Hieroxestinae, Teichobiinae and Stathmopolitinae). – In: Karsholt O., Mutanen M. & Nuss M. (eds): *Microlepidoptera of Europe 9*. Brill, Leiden, Boston, pp. 1–248. https://doi.org/10.1163/9789004387515_002

Nel J. 2014: Nouveaux microlépidoptères pour la faune de France (Lep. Nepticulidae, Tineidae, Scythrididae, Tortricidae). – *Oreina* **26**: 5–8.

Rennwald E. & Rodeland J. 2026: *Genus Novotinea Amsel, 1938. Bestimmungshilfe für die in Europa nachgewiesenen Schmetterlingsarten.* Available from: https://lepiforum.org/wiki/taxonomy/Tineoidea/Tineidae/Meessiinae/Novotinea?view=0&regions (accessed 3 January 2026)

Sáfián Sz., Katona G. & Tóth B. 2023: First report of the palm borer moth, Paysandisia archon (Burmeister, 1879), in Hungary (Lepidoptera: Castniidae). – *Folia entomologica hungarica* **84**: 137–143. https://doi.org/10.17112/FoliaEntHung.2023.84.137