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Occurrence of *Pseudococcyx tessulatana* (Staudinger, 1871) in Hungary (Lepidoptera: Tortricidae)

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Abstract – *Pseudococcyx tessulatana* (Staudinger, 1871) (Lepidoptera: Tortricidae) is recorded from Hungary (and from Central Europe) for the first time.

Key words - faunistics, distribution, cone, *Cupressus*, endophagous larva, new record, Olethreutinae

INTRODUCTION

The family Tortricidae (Lepidoptera) includes 473 recorded species in Hungary (Buschmann & Pastorális 2025, present paper), making it the most species-rich family of Lepidoptera in our country. It is divided to three subfamilies: Chlidanotinae, Olethreutinae, and Tortricinae. *Pseudococcyx* Swatschek, 1958 (Olethreutinae) was known to be represented by two species in the Hungarian fauna so far: *Pseudococcyx posticana* (Zetterstedt, 1839), and *Pseudococcyx turionella* (Linnaeus, 1758). Larvae of both species are endophagous: they prepare mines in the buds of *Pinus* spp. (Pinaceae). The aim of this paper is to present the first records of a third species of the genus, *Pseudococcyx tessulatana* (Staudinger, 1871), from Hungary, whose endophagous larva feeds in Cupressaceae species. *Pseudococcyx tessulatana* is native to Western Europe and the Mediterranean area (Razowski 2003) and has not been reported in Central Europe so far.

The voucher specimens are deposited in the Lepidoptera Collection of the Hungarian National Museum Public Collection Centre – Hungarian Natural History Museum, Budapest (HNHM), and in the private collection of the senior author (coll. Szabóky).

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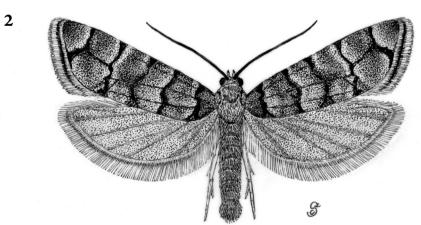
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RESULTS

Pseudococcyx tessulatana (Staudinger, 1871) (Figs 1–2)

Material examined – Hungary: one male (Fig. 1), Budapest, 21st district, Csepel-Királyerdő, corner of Hollandi and Matróz streets, at light, 160 W HMLI, 29.IV.2025, leg. Balázs Tóth, deposited in the HNHM; one male (Fig. 2), Érd, Avar street 20, 4.VI.2025, leg. Attila Pál, deposited in coll. Szabóky; one male, Érd, Avar street 20, 20.VII.2025, leg. Attila Pál, deposited in coll. Szabóky.





Figs 1-2. Pseudococcyx tessulatana (Staudinger, 1871) voucher specimens from Hungary, 1 = male from Budapest, dorsal habitus, scale bar = 5 mm, 2 = drawing of a male from Érd (photo by Balázs Tóth, drawing by Csaba Szabóky)

Remarks – First records for Hungary and for Central Europe. The first voucher specimen was collected in a garden in a suburban area of Budapest, close to the Ráckeve-Soroksár branch of the Danube. It arrived to a white sheet illuminated by artificial mixed light, between 23–24 h. The latter two voucher specimens were collected at a house in a suburban area of Érd, Pest County.

Single specimen records of Mediterranean microlepidopteran species in Hungary have become not exceptional in the past years, see e.g., Takács & Kőszegi (2023, 2024). The latest such observation is that of *Loryma egregialis* (Herrich-Schäffer, 1838) (Pyralidae) by Fazekas & Farkas (2025); however, in this case only a photograph is available and no voucher specimen has been collected, it is not acceptable to report Lepidoptera species (or any other invertebrates) as new for country faunas without a voucher specimen deposited in a (preferably public) collection; therefore, the Hungarian occurrence of *Loryma egregialis* is considered as in need of confirmation based on deposited, available voucher specimen(s).

The specimens of *Pseudococcyx tessulatana* collected in Hungary may have been imported by transport, either in larval stage with infested plant material, or as adults in (or on) a vehicle. Although the host plants of the species are not native in Hungary, they are popular ornamental trees in gardens. Proposed Hungarian name: "mediterrán gyantamoly".

Distribution – Pseudococcyx tessulatana has been recorded in Europe from the Cis-Caucasian slopes (Russia), the Crimea, Croatia, France (except Corsica), Germany, Greece, Italy, the Netherlands, Portugal, Spain, and Switzerland (GUMHALTER et al. 2024, RENNWALD & RODELAND 2025). One specimen was also found in England (AGASSIZ et al. 2013). Outside Europe it occurs in North Africa and Asia Minor (RAZOWSKI 2003).

Bionomy – The young larva hatches in September and feeds in the cones of Cupressus spp. (Cupressaceae) until next April, consuming the seeds (RAZOWSKI 2003). Adults fly from April through the summer.

Identification – Pseudococcyx tessulatana cannot be confused with any other European species due to its unique creamy pinkish or light brownish forewing decorated with black tessellated ("fish scale-like") pattern. Among species occurring in Hungary, only Gravitarmata margarotana (Heinemann, 1863) (Tortricidae) is somewhat similar regarding its pattern but its colouration is much darker: composed by dark brown and silvery grey fields.

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