

An old enemy of a new moth: the first records of *Diadegma albotibiale* Horstmann, 1973 from Hungary (Hymenoptera: Ichneumonidae)

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Abstract – *Diadegma albotibiale* Horstmann, 1973 (Hymenoptera: Ichneumonidae: Campopleginae) is reported for the first time from Hungary. The voucher specimens were reared from the cocoons of *Coleophora cytisicolella* Takács, Stark, Szabóky et Bozsó, 2026 (Lepidoptera: Coleophoridae), a moth species recently described from Hungary and Austria.

Key words – faunistics, Europe, distribution, ichneumon wasp

INTRODUCTION

Diadegma Förster, 1869 (Hymenoptera: Ichneumonidae) is one of the most species-rich genera of the subfamily Campopleginae with nearly 250 valid species worldwide, of them ca. 150 species occurring in the Western Palaearctic Region (YU *et al.* 2016). Species of this genus are koinobiont endoparasitoids of (almost exclusively) lepidopteran larvae, including several pests (AZIDAH *et al.* 2000, SHAW *et al.* 2016, YU *et al.* 2016). However, despite being the most thoroughly studied biogeographical region, even the Western Palaearctic *Diadegma* species frequently lack comprehensive distribution and host association data, primarily because the identification of members of this genus is difficult and requires specialised taxonomic expertise (HORSTMANN 1969, 1973, AZIDAH *et al.* 2000, SHAW *et al.* 2016). In this paper, *Diadegma albotibiale* Horstmann, 1973 is reported from Hungary for the first time,

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based on voucher specimens reared from the cocoons of the moth species *Coleophora cytisicolella* Takács, Stark, Szabóky et Bozsó, 2026 (Lepidoptera: Coleophoridae), recently described from Hungary and Austria (TAKÁCS *et al.* 2026).

Taxonomy and nomenclature follow YU *et al.* (2016). Identifications were based on HORSTMANN (1969, 1973) and TOWNES (1970). The specimens were identified by the first author using a Nikon SMZ645 stereoscopic microscope. All examined material is deposited in the Hungarian National Museum Public Collection Centre – Hungarian Natural History Museum, Budapest (HNHM). Photos were taken with a Nikon-D7200 camera, equipped with a Nikon AF-S Micro Nikkor 105mm objective and DCR-150 Raynox Macro Conversion lens. Image capture was controlled via Helicon Remote, images were stacked using Helicon Focus.

RESULTS

Diadegma albotibiale Horstmann, 1973 (Fig. 1)

Material examined – Hungary. Fejér County: Lovasberény, Kazal-hegy, 19.III.–1.VI.2025, leg. A. Takács, five females, three males; Sárbogárd, Bolondvár, 17–24.III.2025, leg. A. Takács, five females, one male; Székesfehérvár, Aszalvölgy, 26.III.2025, leg. A. Takács & K. Kőszegi, three females, one male. Pest County: Isaszeg, 23–24.III.2025, leg. A. Takács, one female, one male; Kistarcsa, Küdői-hegy, 17–23.III.2025, leg. A. Takács, three females, four males; Pilisborosjenő, Teve-szikla, 19–26.III.2025, leg. A. Takács & Cs. Szabóky, two females, one male; Pilisvörösvár, Kopár Csárda, 19–28.III.2025, leg. A. Takács & Cs. Szabóky, five females, one male. Tolna County: Hőgyész, Lófej-hegy, 26.III.2025, leg. A. Takács & G. Lendvai, three females. Veszprém County: Veszprém, Látó-hegy, 19–30.III.2025, leg. A. Takács, Sz. Molnár & T. Szalárdi, three females, two males; Nagyvázsony, 22.III.2025, leg. A. Takács, B. Barabás & T. Szalárdi, two females.

Remarks – First records from Hungary. *Diadegma albotibiale* was described from Italy and Finland (HORSTMANN 1973); since then, it has been reported from Poland (KAZMIERCZAK 2004), Croatia (KOLAROV 2008), and Hungary (present paper) so far. AUBERT (1983) listed its known host species as *Coleophora calycotomella* Stainton, 1869, *Coleophora chamaedriella* Bruand, 1852, *Coleophora colutella* (Fabricius, 1794), *Coleophora discordella* Zeller, 1849, *Coleophora squamella* Constant, 1885, and *Coleophora trifariella* Zeller, 1849 (all Lepidoptera: Coleophoridae). The present study reports *Coleophora cytisicolella* as a newly discovered host species of *Diadegma albotibiale*.



Fig. 1. Voucher specimen of *Diadegma albotibiale* Horstmann, 1973 from Hungary
(photo by Zoltán Vas)

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