

On the presence of *Phytodietus (Neuchorus) tauricus* Kasparyan & Shaw 2008 in France (Hymenoptera, Ichneumonidae), a surprisingly westerly occurrence

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Abstract

Phytodietus (Neuchorus) tauricus Kasparyan & Shaw has been captured in France for the first time, and thus constitutes the first data in Western Europe for this species. Characters for identifying the species are given.

Keywords : Distribution, Taxonomy, Eastern Europe.

Résumé

Sur la présence de *Phytodietus (Neuchorus) tauricus* Kasparyan & Shaw 2008 en France (Hymenoptera, Ichneumonidae), une occurrence étonnamment très à l'ouest

Phytodietus (Neuchorus) tauricus Kasparyan & Shaw a été capturé pour la première fois en France et constitue donc la première donnée en Europe occidentale pour cette espèce. Les critères d'identification de l'espèce sont donnés.

Mots clés : Distribution, Taxonomie, Europe de l'Est

Introduction

The genus *Phytodietus* Gravenhorst, 1829 is included in the tribe Phytodietini of the subfamily Tryphoninae (Hymenoptera, Ichneumonidae). Three subgenera and more than 20 species occur in Europe (Achterberg & Zwakhals 2004; Györfi 1944; Kasparyan & Shaw 2008; Kasparyan & Tolkanitz 1999; Kolarov 2003; Kostro-Ambroziak 2007a, 2007b; Kostro-Ambroziak & Sawoniewicz 2007; Roman 1938). According to the bibliography, *Phytodietus* species are koinobiont ectoparasitoids of semi-concealed larvae of several families of Microlepidoptera (Loan 1981; Kasparyan & Shaw 2008). *Phytodietus* are mid-sized species easily distinguishable from other Tryphoninae genera (Townes 1969), but the identification of the different the species remains complicated. As a result,

new species and distribution data are still being discovered (Kasparyan 2016; Kostro-Ambroziak & Sawoniewicz 2007; Kostro-Ambroziak & Magnusson 2014, Kostro-Ambroziak & Di Giovanni 2016), like *Phytodietus (Neuchorus) tauricus* Kasparyan & Shaw. This species, described in 2008, was until now known only from Ukraine and Russia.

Material and methods

Two females of *Phytodietus (Neuchorus) tauricus* were recently captured in France.

The first specimen arose from an important trapping campaign with Malaise traps in a French National Nature Reserve "Réserve Naturelle Nationale du Ravin de Valbois" (Langlois, Claude & Tissot 2014). It was captured between 08.vi.2017 and 19.vi.2017 in Cléron, in the Doubs county



Fig. 1 - Habitat in which the specimen from Cléron was caught (Photo: Frédéric Ravenot).

[47.094600N, 6.0920200E, 500m]. The habitat consists of a thermophile calcareous forest fringe, near oak forest and a cliff (**Fig. 1**). This specimen has been donated to the National Museum of Scotland.

The second specimen was netted by the author on 10.v.2019 in Bellegarde-Marsal, in the Tarn county [43.929672N, 2.262655E, 250m]. The habitat consists of a young forest stage on a clay-carbonate



Fig. 2 - Habitat in which the specimen from Bellegarde-Marsal was netted.

North slope, mostly dominated by chestnut and oak, near the Tarn river (**Fig. 2**). This specimen is retained by the author.

Identification

The subgenus *Neuchorus* Uchida can be recognised by: fore wing with areolet; hind wing with nervellus always intercepted by discoidella; tergite 1 strongly narrowed anterior to spiracles, about twice (1.6–2.7) as long as wide and its dorso-lateral margins usually rounded behind spiracles; epomia distinct; flagellum generally with 36–44 segments (except for *Ph. maculator* with 34 segments). Frontal (and often facial) orbits yellow; hind tibia without white spot at base. Mesopleurum with fine but discernible punctures (Kasparyan & Shaw 2008).

Within the subgenus *Neuchorus*, *Phytodietus* (*N.*)

tauricus is easily recognised by: the ovipositor sheath 1.5 times as long as hind tibia in ♀♀ (**Fig. 3**); the numerous tyloids in ♂♂ (on flagellomeres from the 15th to the subapical ones) that give the flagellum in lateral view a saw-like (serrated) appearance; and its dark ground color in both sexes, with very poorly developed yellow marks (**Fig. 3**).

The detailed description of the species is given by Kasparyan & Shaw (2008).

Comments

Given its known distribution (Ukraine and Russia), the presence of this species in France constitutes a very far westerly occurrence. These data emphasise the lack of knowledge about this genus and its distribution patterns in the Western Palaearctic (Johansson 2017).

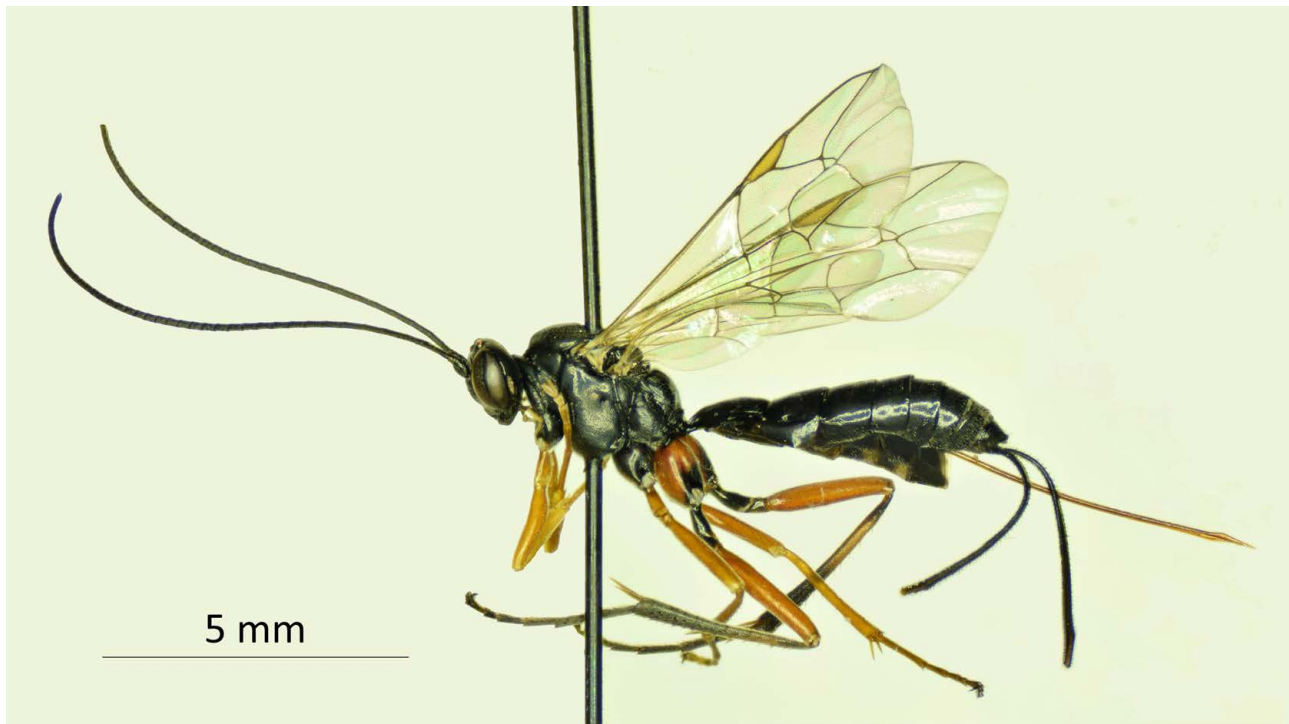


Fig. 3 - *Phytodietus* (*N.*) *tauricus* ♀, habitus in lateral view.

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