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Pristiphora krausi (Lacourt, 2006), an enigmatic species new to Italy, found in the Apennines of Romagna

(Insecta: Hymenoptera: Symphyta: Tenthredinidae)

Abstract

The first record for Italy of *Pristiphora krausi* (Lacourt, 2006), an enigmatic species formerly known only on the holotype from Vosges (France) and described in the monotypic genus *Dinematus* Lacourt, 2006, is reported. The species has been identified among the materials collected many years ago by Guido Campadelli (1942-2002) within the "Parco Nazionale delle Foreste Casentinesi, Monte Falterona e Campigna" (Apennines of Romagna and Tuscany, Northern Italy).

Key words: Hymenoptera, Symphyta, Tenthredinidae, *Pristiphora*, *Dinematus*, Italy, Apennines, Romagna.

Riassunto

[Pristiphora krausi (Lacourt, 2006), una specie enigmatica nuova per l'Italia, trovata nell'Appennino Romagnolo (Insecta: Hymenoptera: Symphyta: Tenthredinidae)]

Pristiphora krausi (Lacourt, 2006), una specie enigmatica sinora nota solo sull'olotipo raccolto nei Vosgi (Francia) e per la quale era stato creato il genere monotipico *Dinematus* Lacourt, 2006, viene segnalata per la prima volta per l'Italia. La specie è stata identificata tra i materiali raccolti molti anni or sono dal compianto Guido Campadelli (1942-2002) nel "Parco Nazionale delle Foreste Casentinesi, Monte Falterona e Campigna".

Parole chiave: Hymenoptera, Symphyta, Tenthredinidae, *Pristiphora*, *Dinematus*, Italia, Appennino, Romagna.

Introduction

Many years ago, among the sawflies collected in the "Parco Nazionale delle Foreste Casentinesi, Monte Falterona e Campigna" by the late friend Guido Campadelli and that he entrusted to me for their identification, I found the female specimen of an enigmatic Nematine sawfly for which I was unable to find a name. After having accurately examinated that specimen, a female, I realized it could be an undescribed species perhaps referable to the vast genus *Pristiphora* Latreille. It was so that Guido and I decided to publish this confusing record under the name

of "?Pristiphora sp. n." in one of our papers on sawfly fauna of the Apennines of Romagna and Tuscany (CAMPADELLI & PESARINI F., 2001).

Only after the publication of a contribution by LACOURT (2006), in which that Author described two new genera for two new species of Nematinae, I did notice the curious similarity of the Apennine specimen with the holotype (a female) of *Dinematus krausi* Lacourt, 2006, accurately described and figured both in photographs and drawings (details of wing venation and sawteeth). The monotypic genus *Dinematus* Lacourt, 2006 was erected in the same paper for the new species in consideration of its peculiar features which, according to the Author, recalled partly the genus *Dinematus* Dahlbom and partly the members of tribe Pristiphorini. Most recently, the genus *Dinematus* Lacourt has been placed in synonymy of *Pristiphora* Latreille, thus merging also its unique and enigmatic species into the latter large genus (PROUS et al., 2019). Currently, therefore, the name of that species is *Pristiphora krausi* (Lacourt, 2006).

Pristiphora krausi (Lacourt, 2006)

?Pristiphora sp. n., Campadelli & Pesarini F., 2001: 27

ITALY: Emilia-Romagna: Appennino Tosco-Romagnolo, Parco Nazionale delle Foreste Casentinesi, Monte Falterona e Campigna: La Stretta, 1275 m, 2.VI.1990, 1 ♀, leg. G. Campadelli.

New to Italy.

Pristiphora krausi (Lacourt) (Fig. 1) had been described only on the female holotype of *Dinematus krausi* Lacourt, collected in the Vosges, a mountain range in the north-east of France. The female collected 600 km south-east of that from the Romagna Apennines is the only other specimen of *Pristiphora krausi* known to date. The male of this species therefore remains unknown, as well as the host plant, the larva and the biology.

Pristiphora krausi (Lacourt) is undoubtedly a very rare species, probably of mountain forest habitat, whose distribution remains to be clarified: it cannot be established, at the state of the art, whether the absence of its findings along the Alpine chain reflects a disjointed range (certainly not the most usual) or is more simply due to its rarity.

The Apennine specimen fully corresponds to the description given by LACOURT (2006) except for some discrepancies relating to the wing venation, which we will now discuss.

In the holotype a transverse-radial vein (2r) is present in the right front wing, while in the left front wing it is wanting. The presence of a transverse-radial vein (2r) in the anterior wing is not normally observed in *Pristiphora*, while it is characteristic of some genera believed to be basal in Nematinae (as *Hoplocampa Hartig*, *Dineura Dahlbom*, *Hemichroa Stephens*, *Mesoneura Hartig*). It is no coincidence that LACOURT (2006) remarked that the new species seemed *a priori* very close to

Dineura Dahlbom, although he believed, in conclusion, that it should be included in the tribe Pristiphorini despite the presence of a transverse-radial vein in the right front wing.

As noted by Prous et al. (2019), «the presence of this vein in *Pristiphora* is rather rare but has been observed in at least four other West Palaearctic species: *helvetica* (Benson 1960b), *malaisei*, *robusta*, and *staudingeri* (Prous et al., 2014, 2017), species, furthermore, that are only distantly related to each other. On this basis, these AA. did not consider keeping *krausi* in a distinct genus from *Pristiphora*.

In fact it must be added that in the specimen from the Apennines no transverseradial vein is observed, i.e. in both anterior wings the radial cell is normally entire as in all species of *Pristiphora*; this reinforces, ultimately, the conclusions reached by Prous et al. (2019).

The only other difference found between the Apennine specimen and the holotype concerns the intercostal vein (Sc), which ends on the Subcosta (R) more basally, even if slightly, than the basal vein (M) (Fig. 2) (in the original diagnosis it is indicated as interstitial, but probably this stands for "almost" interstitial, as shown in the drawing: LACOURT, 2006: 239, fig. 5, in which however its position is slightly distal to the M vein rather than basal); in addition, in the Apennine specimen, the intercostal vein is vanished in its anterior half.

Concerning *Pristiphora krausi* Lacourt, some characteristics not mentioned in the original description can be added or pointed out.

The 3rd antennal joint is weakly but distinctly curved (as can also be clearly seen from the photos of the holotype: Lacourt, 2006: 238, fig. 4a, 4b). The mouth parts seem to be particularly developed, but this is perhaps due to the fact that in this specimen the maxillae and the labium are everted rather than hidden, as often happens, under the mandibles and the clypeus; the labium, however, is very large, with paraglossae semicircularly shaped and overlapping an even larger glossa (Fig. 3).

Other characteristics mentioned in the description of *Dinematus* Lacourt and found in the Apennine specimen are unusual in *Pristiphora*, such as the distance between the basal vein (M) and the 1st recurrent vein (1m-cu) of the front wings, which are very far one from the other (Fig. 2).

Prous et al. (2019) put forward the hypothesis that *Pristiphora krausi* may belong to the *Pristiphora depressa* group (from *Pristiphora depressa* (Hartig, 1840)), but this only on the basis of the supposition that *P. krausi* may be the female of *Pristiphora ifranensis* Lacourt, 1973, known only on the holotype, male, coming from the Middle Atlas (Morocco) and belonging precisely to the *depressed* group; this bold supposition is based moreover only on a similarity in coloration recognized by the examination of the two holotypes, the male of *ifranensis* and the female of *krausi*. It is preferable to consider that *Pristiphora krausi* is a rather isolated entity within the great genus *Pristiphora*, whose major affinities are yet to be clarified.



Fig. 1. $Pristiphora\ krausi$ (Lacourt) \bigcirc , La Stretta, 1275 m, Apennines of Romagna, Italy: habitus. The pin has been deliberately removed from the image.



Fig. 2. *Pristiphora krausi* (Lacourt) ♀, La Stretta, 1275 m, Apennines of Romagna, Italy: right front wing.



Fig. 3. *Pristiphora krausi* (Lacourt) ♀, La Stretta, 1275 m, Apennines of Romagna, Italy. Detail of head and thorax (side and ventral view), to show the enlarged mouthparts.

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