

***Iridothrips* is actually a valid genus (ord. Thysanoptera: Thripidae)**

Liliana VASILIU-OROMULU

Rezumat***Iridothrips* este actualmente un gen valid (ord. Thysanoptera: Thripidae)**

Lucrarea prezintă argumente variate, câteva dintre ele noi, prin care genul *Iridothrips* redevine gen valid, nu un sinonim junior al genului *Frankliniella* syn. n. (MOUND).

Abstract

The work presents various arguments, some of them new, as the perception of genus *Iridothrips* as valid and not as a junior synonym of *Frankliniella* syn. n. (MOUND).

Keywords: *Iridothrips*, valid genus, *Frankliniella* syn. n. Iris thrips

Introduction

In 1924 WATSON describes a new species, *Bregmatothrips iridis*; PRIESNER in 1940 mentions the genus *Iridothrips* as being synonym with *Bregmatothrips* and PELIKÁN, in 1961, identifies another species, *Iridothrips mariae* LATER, in 1976, MOUND publishes in his book "Thysanoptera" a review of the genus *Frankliniella*, in which he has introduced the species *iridis*, *Iridothrips* been considered as non-valid genus.

Materials and methods

Iridothrips iridis was collected in the Danube Delta, Romania, and in Löddösness (Sk), a natural reservation in Sweden, on *Iris pseudacorus*'s leaves and *Iridothrips mariae* on *Typha shuttleworthii*'s leaves, in Sinaia, in Romania.

The insects have been preserved in AGA solution. Some of the slides are in Sweden, in Lund's Museum and in Alnarp Plant Protection Institute collections and some in Romania, in Bucharest, in the collections belonging to the Institute of Biology.

Results and discussions

Based on a rich scientific material, collected in Romania and Sweden and because we have only mentioned it in the general list of the thrips species in

Romania (1998) without describing them, separately, as new species for Romania, (for Sweden the list in under print) the description of these species is necessary for the specialists and to provide the necessary arguments to consider *Iridothrips* a valid genus. One of the species is:

***Iridothrips iridis* (WATSON, 1924)** ("Iris thrips")

Entomologist's mon. MAG (1924): 253 (*Bregmatothrips iridis*) PRIESNER (1926/28): 267-269; STANNARD (1968): 320-321; PRIESNER (1964): 65; JACOT GUILLARMOD (1974): 838-839.

The species belongs to the S/Order Terebrantia HALIDAY, 1836, Family Thripidae HALIDAY, 1836, S/ Family Thripinae (STEPHENS) KARNY, 1921, Tribus Thripini PRIESNER, 1949, S/Tribus Thripina PRIESNER, 1957.

Location of type: unknown.

Find: the Netherlands, Bassenheim

Habitat: *Iris pseudacorus*'s leaves

Distribution: Europe, W and E - coasts of N. America

Key to species (MOUND 1976): female usually micropterous; males always micropterous; metanotum with equiangular reticulations, median setae less than half as long as metanotum (fig. 1); tergites sculptured between median pair of setae; head unusually large; brown species with antennal segments III and IV as well as fore tibiae, yellow.

Mound has regarded *Iridothrips iridis* as "an

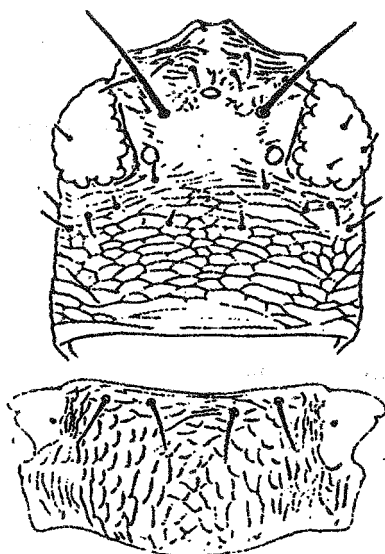


Fig. 1. *Iridothrips iridis* head and metanotum (after MOUND)

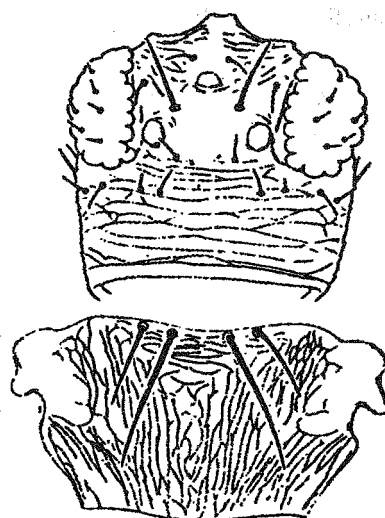


Fig. 2. *Frankliniella tenuicornis* head and metanotum (after MOUND)

aberrant species of *Frankliniella*, and the name *Iridothrips* PRIESNER as a junior synonym of *Frankliniella* syn. n."

We think that the *Iridothrips* genus is a valid one for the following differentiating characterizes:

Iridothrips iridis has the posterior and anterior ocelli smaller than *Frankliniella*'s; they come out of a triangle joining these ocelli, while on *Frankliniella tenuicornis* (fig. 2) they are inside of this triangle.

The basis of the head is narrow at *Frankliniella* and much wider at *Iridothrips*.

The head has a strong reticulate structure and a prominent protuberance at *Iridothrips* but a very large structure and a smaller protuberance at *Frankliniella*.

The antennal segments III and IV are forked on *Frankliniella* and the III simple and the IV forked on *Iridothrips* at ours exemplars

Iridothrips iridis has found different types of wings; or it is wingless. The following mentions can be found in literature:

MALTBAEK J. (1932): ♀ macro-hemimacro-brachypterous and ♂ apterous.

MORISON D. G. (1948): ♀ macro-hemimacro-micropterous and ♂ apterous.

PRIESNER H. (1964): ♀ macro-brachypterous, ♀ brachypterous.

STANNARD L. J. (1968): ♀ macro-brachy-micropterous and ♂ brachypterous.

SCHLIEPHAKE G. (1979): ♀ macro-brachypterous and ♂ apterous

We have found only micropterous females and males, in great number, on *Iris pseudacorus*, in Romania and in Sweden.

At the genus *Frankliniella*, generally ♀ and ♀ are macropterous, only at *Frankliniella nigriventris*

♀ is macro-brachypterous, ♂ brachypterous, at *F. fusca*
♀ macro-brachypterous, at *F. tristi* ♀ brachypterous.

Iridothrips iridis is a monophagous, folicolous, hygrophilous species, in leaf funnels of *Iris pseudacorus*.

In the Löbbösness reservation, in the proximity of *Iris pseudacorus*, in 1999 there was a population of *Acorus calamus*, a hygrophilous plant, which was inhabited by the species *Frankliniella tenuicornis*, a graminicolous thrips, anemochorous spread in the crop areas, so not at all by *Iridothrips iridis* which is specific only for *Iris pseudacorus*.

In Romania there are two species: *Iridothrips iridis* and *I. mariae* PELIKÁN, 1961.

The other species is:

Iridothrips mariae PELIKÁN, 1961

Acta soc.ent.ČSSR 58 (1961): 64-68; PRIESNER (1964): 65; JACOT-GUILLARMOD (1974): 839.

The species belong to the S/Order Terebrantia HALIDAY, 1836, Family Thripidae HALIDAY, 1836, S/Family Thripinae (STEPHENS) KARNY, 1921, Tribus Thripini, PRIESNER, 1949, S/Tribus Thripina PRIESNER, 1957.

Location of type: the Moravia, Lednice, PELIKÁN's collection

Find: *Typha latifolia* and *Typha angustifolia*'s leaves

Distribution: Europe

Key to species (after PELIKÁN, 1961): *Iridothrips mariae* is distinct from *Iridothrips iridis* because of the clear yellow intermediate antennal segments, pale yellow middle and hind tibiae, dark sable-formed

wings, sides of head strongly convergent posterior (whilst parallel in *iridis*) complete comb on abdominal segment VIII. In the male sex the both species differ by larger glandular areas on sternites III to VII in *mariae* and by quite different arrangement of dorsal spines, setae and poruses on segment IX.

In Romania, KNECHTEL found only 1 ♂, on *Typha* sp. 's leaves, in Fetești, in 1943.

We have collected in 1997 a lot of ♀♀, new for Romania and ♂♂, in Sinaia, on *Typha shuttleworthii* 's leaves.

Iridothrips mariae is an oligophagous, folicolous, hygrophilous species, in leaf funnels of different *Typha* sp.

The species, *Iridothrips mariae* PELIKÁN, 1961 is considered by Mound (1976) to be a "degenerate member of *Frankliniella* with typical ctenidium on the VIIIth tergite".

The species has the same necessary characters to belong to *Iridothrips* and it can be mentioned as a valid species.

But, taking into account above all the described characteristics and some new remarks, we opinion that genus *Iridothrips* can be considered to be a valid one, with the species *iridis* and *mariae*.

Conclusions

The study of many thrips exemplars collected from Romania and Sweden, based on old and original arguments [*Iridothrips iridis* has the posterior and anterior ocelli smaller than *Frankliniella*'s; they come out of a triangle joining these ocelli, while on *Frankliniella tenuicornis* they are inside of this triangle, the basis of the head is narrow at *Frankliniella* and much wider at *Iridothrips*, the head has a strong reticulate structure and a prominent protuberance at

Iridothrips but a very large structure and a smaller protuberance at *Frankliniella*], we considered that the genus *Iridothrips* is a valid one, with both species, *Iridothrips iridis* WATSON and *Iridothrips mariae* PEL., demonstrating again MOUND's idea that the name *Iridothrips* PRIESNER is a junior synonym of *Frankliniella* syn. n. and *Iridothrips iridis* is an aberrant species of *FRANKLINIELLA*, and *Iridothrips mariae* is a degenerate member of *Frankliniella*.

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Liliana VASILIU - OROMULU
Institute of Biology,
RO-79651, Bucharest-6,
Spl. Independentei 296, Po Box 56-53,
Romania

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