



Two enigmatic species epithets in the genus *Limothrips* (Thysanoptera, Thripinae)

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Catalogues of the insect Order Thysanoptera, including ThripsWiki (2023), often include a number of names, at genus and at species level, that cannot be associated with any known organism. During some studies of the species listed under the European genus *Limothrips* Haliday, which is associated with Poaceae, it became clear that two species epithets attributed to this genus refer to taxa that are effectively unrecognisable. For neither of these species is any information available on how many specimens were used for the descriptions, nor if the specimens were preserved in any collection. The following note is therefore to clarify the nomenclatural situation, by synonymising one species with a well-known pest species, and to formally consider the other as a **nomen dubium**. We are grateful to our colleagues, Bert Vierbergen and Manfred Ulitzka for their comments on an earlier draft.

Limothrips serotina Targioni-Tozzetti, 1891

This species was described by Targioni-Tozzetti in his book on the animals and insects associated with tobacco plants. At the time of this description the generic classification of the insect Order Thysanoptera was that provided by Amyot & Serville (1843) and derived both from Linnaeus (1758) and Haliday (1836), as summarised by Mound (2024). That classification provided a total of 13 available genera, three of Tubulifera and 10 of Terebrantia. However, the character states that Targioni-Tozzetti provides to support his opinion that his new species represented a member of the Terebrantian genus *Limothrips* are far from clear. The single specimen that he selected to illustrate had damaged antennae, but it is evident from his words that he had more than one individual, including pupae that he referred to as winged nymphs. But there is no indication that these specimens were ever deposited anywhere. The author's statement that the head is cuboid, wider than long, precludes the species from being a member of *Limothrips*, because all known species of this genus have the head longer than wide. Manfred Ulitzka drew our attention to the fore wing description and illustration, which suggest that both longitudinal veins bore complete rows of evenly spaced setae. This could be interpreted as indicating that *serotina* is a member of the genus *Frankliniella*, such as the common European species *Fr. intonsa*. However, that species has five pairs of long setae on the pronotum, whereas *serotina* is described as having a short, transverse pronotum, and illustrated with only a single pair of prominent setae. An alternative interpretation is based on the statement by Targione-Tozzetti that the three ocelli on the head are “chiarì” – that is “clear”. This is an unusual condition for ocelli amongst Terebrantia, in which ocelli are usually surrounded by pigment that is red or brown in colour. In contrast, adults of *Thrips tabaci* that occurs commonly on tobacco in the Mediterranean area, are particularly unusual in having the circum-ocellar region on the head unpigmented. This character state of “clear ocelli”, together with how frequently *tabaci* is found on the leaves of tobacco in the area, suggest that *Limothrips serotina* Targioni-Tozzetti is best regarded as a **new synonym** of the widespread pest species *Thrips tabaci* Lindeman (1889).

Limothrips clarus Solowiow, 1924

Solowiow stated that his new species *clarus* was amongst a few specimens representing five new species of thrips that he collected in Summer 1923 from herbs at Gorki, a Russian city just south of Moscow. There was no indication of the number of specimens involved for any of the species, nor any indication that they were deposited in any reference

collection. Three of the species were members of the Terebrantia. One of these was considered a new genus in a new family – *Paulus* Solowiow in the Paulidae. This genus is now considered a synonym of *Thrips*, and the only species included, *P. gracilis* Solowiow (1924), remains a senior homonym of the North American *Thrips gracilis* Moulton (1936). The second Solowiow Terebrantian species, *Thrips dentatus*, remains an unrecognizable species of genus *Thrips*. However, the first Solowiow species was listed under the heading “Genus *Limothrips* Hal.”, with the only information about this new species being the following words: “Fühler ohne dreieckigen Zusatz auf 2. und 3. Glied. Der ganze Körper und Zusätze sind der färbung nach gleichmäßig hellgelb; die Zwischenräume der Abdomenringe sehr hell, durchsichtig“. Thus, all that the reader can know about this insect is that the body is pale yellow with the abdominal intersegmental membranes translucent, and that the second and third antennal segments do not have any lateral protrusions. The yellow body and lack of lateral projections on the basal antennal segments indicate that this is not a species of the genus *Limothrips*. But there is nothing in this description to even confirm that Solowiow actually had a species of Thysanopteran in front of him. Under these circumstances, it is here formally proposed that the name *Limothrips clarus* Solowiow, 1924 be considered a **nomen dubium**.

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