

Trifurcula pallidella (Duponchel, 1843), new for Spain (Lepidoptera: Nepticulidae)

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Abstract

Trifurcula (Trifurcula) pallidella (Duponchel, 1843) is recorded for the first time from Spain, Andalusia. Previous records were misidentifications. Male genitalia are illustrated and a revised distribution map is provided. A few records of *Trifurcula (Levarchama)* species from the Annotated catalogue published in 2004 are corrected.

KEY WORDS: Lepidoptera, Nepticulidae, *Trifurcula pallidella*, Spain.

Trifurcula pallidella (Duponchel, 1843), nueva para España
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Resumen

Se cita por primera vez para España, Andalucía a *Trifurcula (Trifurcula) pallidella* (Duponchel, 1843). Citas previas fueron malas identificaciones. Se ilustra la genitalia del macho y se revisa el mapa de distribución. Se corrigen unas pocas especies citadas en el Catálogo publicado en el 2004 de *Trifurcula (Levarchama)*.

PALABRAS CLAVE: Lepidoptera, Nepticulidae, *Trifurcula pallidella*, España.

In the catalogue of the Iberian Nepticulidae (VAN NIEUKERKEN *et al.*, 2004a), it was shown that previous records of *Trifurcula (Trifurcula) pallidella* (Duponchel, 1843) for Spain and Portugal were based on misidentifications. In a study on the distribution of this species, published shortly thereafter (VAN NIEUKERKEN *et al.*, 2004b), the westernmost localities for *T. pallidella* were shown to be in Corsica. The occurrence of this species in Spain was considered unlikely, also in the light of the recent increase in collecting effort.

During work on the subgenus *Trifurcula (Levarchama)* (VAN NIEUKERKEN, 2006) I surprisingly discovered that some specimens, earlier identified by me as *T. anthyllidella*, in fact were misidentified *Trifurcula pallidella*. The material, listed by VAN NIEUKERKEN *et al.*, (2004a), consists of two males and six females from Málaga: 10 km N Marbella, 24-25-IV-2001, J. Junnilainen (in coll. Junnilainen and RMNH Leiden). The material was – too quickly – identified on external characters alone, assuming it was the widespread *T. anthyllidella* on the basis of external similarity. The material is somewhat worn, so that the paler colour was attributed to wear rather than to a real difference. The male genitalia are illustrated in Fig. 1. The locality is in an area which is extremely rich in species of Nepticulidae, including several still unnamed *Trifurcula* species. There has been a lot of collecting of Nepticulidae in Andalusia by E. Traugott-Olsen, A. and Z. Laštůvka, and myself, so that the finding of yet another – widespread – species, is a surprise. *Trifurcula pallidella* is now, next to *T. subnitidella* (Duponchel, 1843) (see VAN NIEUKERKEN, 1990), the most widespread species of the subgenus *Trifurcula*. A revised distribution map is presented in Fig. 2. This map also corrects one mistake in the earlier version (VAN NIEUKERKEN *et al.*, 2004b: fig. 26): the Turkish record (Brussa or Bursa) was placed completely on the wrong side of Turkey, caused by attributing the coordinates to the wrong UTM zone. The correct UTM coordinates are 25S PE77, the dot is

now correctly placed in West Anatolia, near the coast of the sea of Marmara, which also makes more sense in relation to the records in Greece.

The new record supports the hypothesis that there should be an additional Mediterranean host for *T. pallidella*, next to the *Chamaecytisus* species and *Lembotropis nigricans*, which are both absent from (southern) Spain. The suggestion that it could be *Calicotome*, is very well possible here: *Calicotome spinosa* is very common in the coastal area of southern Spain. Because many other Genisteae occur in Spain, further research is needed to identify the hostplant here with more certainty.

More corrections

I would like to take the opportunity to correct a few more errors for the Spanish fauna, which came to light during the review of *Trifurcula (Levarchama)*.

Trifurcula (Levarchama) anthyllidella Klimesch, 1975

Two records have to be removed from the Spanish list (see VAN NIEUKERKEN, 2006): the Marbella record cited above, and 2 ♂♂, Granada: Sierra Nevada, Carretera del Veleta, 1750 m, 15-VII-1971, [on label host as *Rhamnus myrtifolius*], e. l. 5-VII-1971, JK (ZSMC), which are misidentified *T. cryptella*.

Trifurcula (Levarchama) cryptella (Stainton, 1856)

The record from Barcelona, Castellet-Villafranca del Panadés, should be removed. It is a misidentification for *T. eurema* (Tutt, 1899), which was already known from this province. The above cited specimens from Granada: Sierra Nevada, Carretera del Veleta, actually is *T. cryptella* and therefore now the second Spanish record. It is still not completely certain that this material is indeed from the Sierra Nevada, since it is impossible that these emerged from the *Rhamnus* mines, which almost certainly belong to *Stigmella alaternella* (Le Marchand, 1937) (VAN NIEUKERKEN, 2006).

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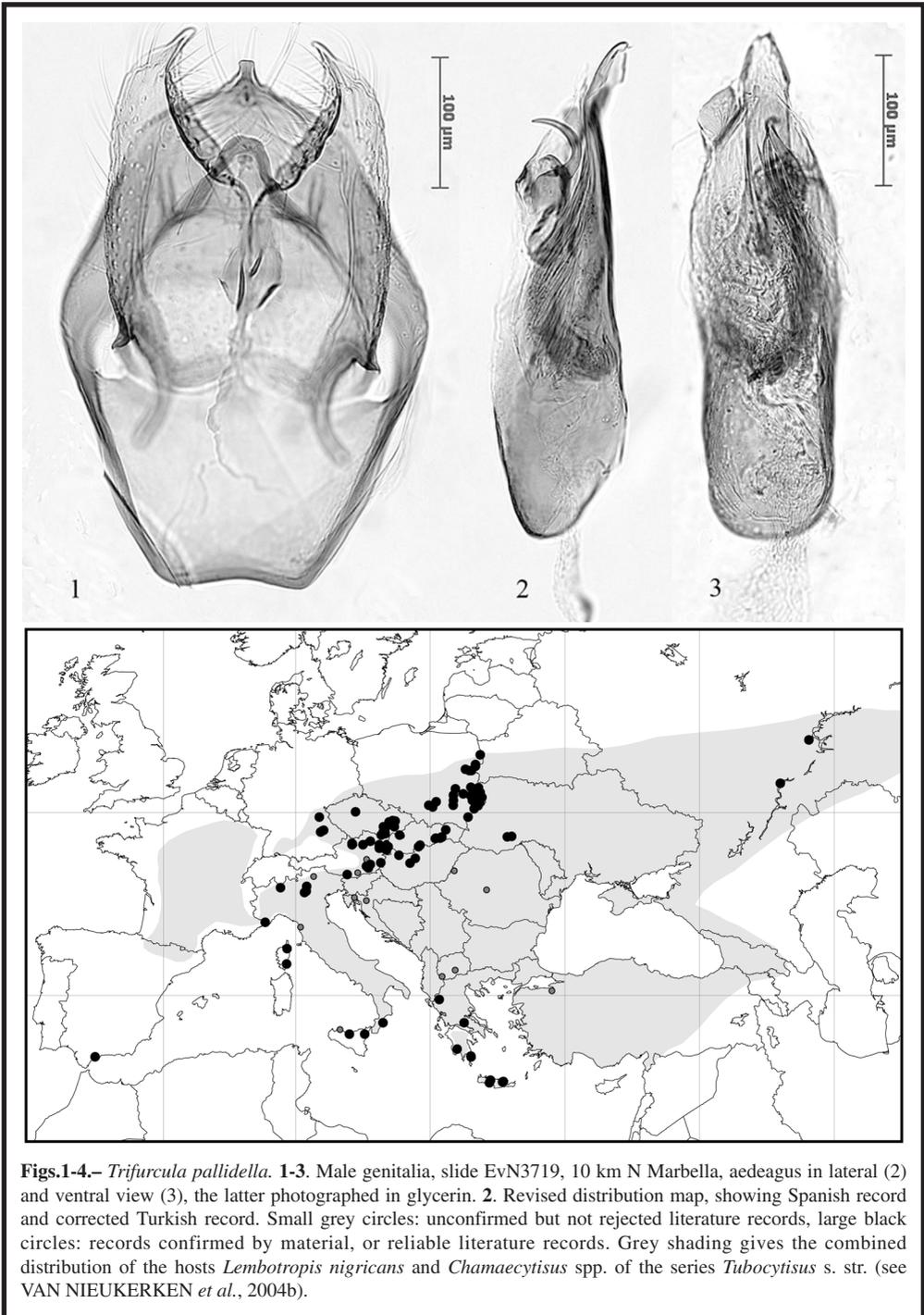
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Figs.1-4.– *Trifurcula pallidella*. 1-3. Male genitalia, slide EvN3719, 10 km N Marbella, aedeagus in lateral (2) and ventral view (3), the latter photographed in glycerin. 2. Revised distribution map, showing Spanish record and corrected Turkish record. Small grey circles: unconfirmed but not rejected literature records, large black circles: records confirmed by material, or reliable literature records. Grey shading gives the combined distribution of the hosts *Lembotropis nigricans* and *Chamaecytisus* spp. of the series *Tubocytisus* s. str. (see VAN NIEUKERKEN *et al.*, 2004b).