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## Revision of the genus *Istrianis* Meyrick, 1918 (Lepidoptera, Gelechiidae) with special regard to the Palearctic region

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### Abstract

Twenty-one species of the genus *Istrianis* are recognized as valid in the world fauna, 11 of which are described as new: *I. pseudomyricariella* sp. nov. (Greece, Kyrgyzstan, Tadjikistan), *I. nilssoni* sp. nov. (Greece), *I. kravchenkoi* sp. nov. (Palestine), *I. sattleri* sp. nov. (Pakistan), *I. armatus* sp. nov. (Yemen), *I. lvovskyi* sp. nov. (Mongolia), *I. sruogai* sp. nov. (Turkmenistan, Tadjikistan), *I. piskunovi* sp. nov. (Ukraine), *I. falkovitshi* sp. nov. (Turkmenistan), *I. kyrgyzsquamella*

**sp. nov.** (Kazakhstan, Kyrgyzstan), *I. yemeniasquamella* **sp. nov.** (Yemen). *Teleia myricariella* var. *arenicolella* Caradja, 1920 is re-called from synonymy of *I. myricariella* (Frey, 1870) and considered as a valid species: *Istrianis arenicolella* (Caradja, 1920) **sp. rev.** One new synonym is established: *Teleia amilcarella* Lucas, 1933 **syn. nov.** of *I. arenicolella*. One new combination is proposed: *I. steganotricha* (Meyrick, 1935), **comb. nov.** (ex *Telphusa*). Redescriptions and identification keys for all the Palearctic species and for two new species from Yemen are provided, accompanied by illustrations of the adults, and male and female genitalia.

**Key words:** Lepidoptera, Gelechiidae, *Istrianis*, Palearctic Region, new species, new records

## Introduction

The genus *Istrianis* was described from south-western India with *I. crauropa* Meyrick, 1918 as the type species. For a long time it was considered as monotypic. In a contemporary revision of European Litini the genus was redescribed, three species from the European fauna and one species from Egypt were transferred to *Istrianis*, and some new synonyms were established (Huemer & Karsholt 1999). The generic diagnosis was subsequently improved by the description of additional characters of the head and thorax in a revision of Holarctic Litini (=Teleiodini) (Lee & Brown 2008a). Recently the genus *Pseudoteleia* Amsel, 1935, with two species from the Middle East, was synonymized with *Istrianis* and a new species was described from southern Africa (Bidzilya & Mey 2011). So, at the beginning of this study six *Istrianis* species were known from the Palearctic region, one species from the Oriental region, and one species from the Afrotropical region.

During the preparation of a manuscript for a checklist of Ukrainian Gelechiidae the first author realized that the dubious record of *I. squamodorella* (Amsel, 1935) from the Kharkov region (Piskunov 1981; Budashkin & Piskunov 1990) must be referred to an undescribed *Istrianis* species. *Istrianis squamodorella* has been recorded also from Mongolia (Lvovsky & Piskunov 1989), but examination of the pertinent material showed that this record is incorrect and specimens from Mongolia represent another new species. Further attempts to find comparative material from other regions resulted in the discovery of a third undescribed species from Turkmenistan. Moreover two specimens of "*I. myricariella*" from Spain proved to be closely related to *Teleia myricariella* var. *arenicolella* Caradja, 1920. The last taxon was described from Algeria and considered a synonym of *I. myricariella* (Park, 1996). This synonymy was considered doubtful by Huemer & Karsholt (1999). We were able to check type-material of *Teleia myricariella* var. *arenicolella* and concluded that this taxon must be treated as a distinct species.

Our study of additional material from the eastern Mediterranean, Arabia and Central Asia resulted in the recognition of further undescribed species. Therefore it seemed justified to present these new data on the genus *Istrianis* into a special contribution. Along with the description of the new species we provide detailed descriptions of the few already known species. A key to all the Palearctic *Istrianis*-species accompanied by illustrations of the adult and the genitalia of both sexes is given to facilitate species identification. Records on the distribution and biology of all species are revised and complemented by new data.

Most *Istrianis* species are rare in collections, and the literature on the genus is scattered and limited. However, some unpublished taxonomic changes made by Linda Pitkin and Klaus Sattler (both at BMNH) have been made available on the internet by Beccaloni *et al.* (2005), and from there they have been copied into numerous webpages. These new synonyms and combinations have not yet been formalized in print. Based on the advice of Thomas Pape, member of the International Commission of Zoological Nomenclature, we are taking the opportunity to do this here.

**Notes.** *Teleiodes excentricella* (Turati, 1934) is externally very similar to some species of *Istrianis*, and like *I. brucinella* and *I. wachtlia* its larva produces galls on *Tamarix*. However, according to its genitalia *excentricella* belongs in the genus *Teleiodes* Sattler, 1960, as indicated by Beccaloni *et al.* (2005), who indicate *Teleiodes paradoxa* Piskunov & Emelyanov, 1982 to be a synonym of *T. excentricella*.

*Lita excentricella* was described from a single specimen from Libya (Turati 1934). It also occurs in Tunisia where a specimen was bred from a gall on a twig of *Tamarix* sp. by the second author. In BMNH there are several specimens of this species bred from galls of *Tamarix* in Algeria. *Teleiodes paradoxa* was described from several specimens bred from galls of *Tamarix araratica* Gorschk. and *T. ramosissima* Ledeb. in Armenia (Piskunov & Emelyanov 1982). It is also known from Turkmenistan.