

A new species of *Agdistis* Hübner, 1825 from Tajikistan (Pterophoridae)

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Abstract. *Agdistis tugai*, sp. n., is described based on two females collected in south Tajikistan. The habitat is a so-called tugai forest that consists of *Populus diversifolia* Schrenk trees and tamarisk shrubs (*Tamarix* sp.). The forest is surrounded by steppe. The adult and the female genitalia are illustrated. The type specimens will be deposited in the collection of the Natural History Museum of Basel, Switzerland (Naturhistorisches Museum Basel). Records for five other Pterophoridae species from Tajikistan are also given.

Introduction

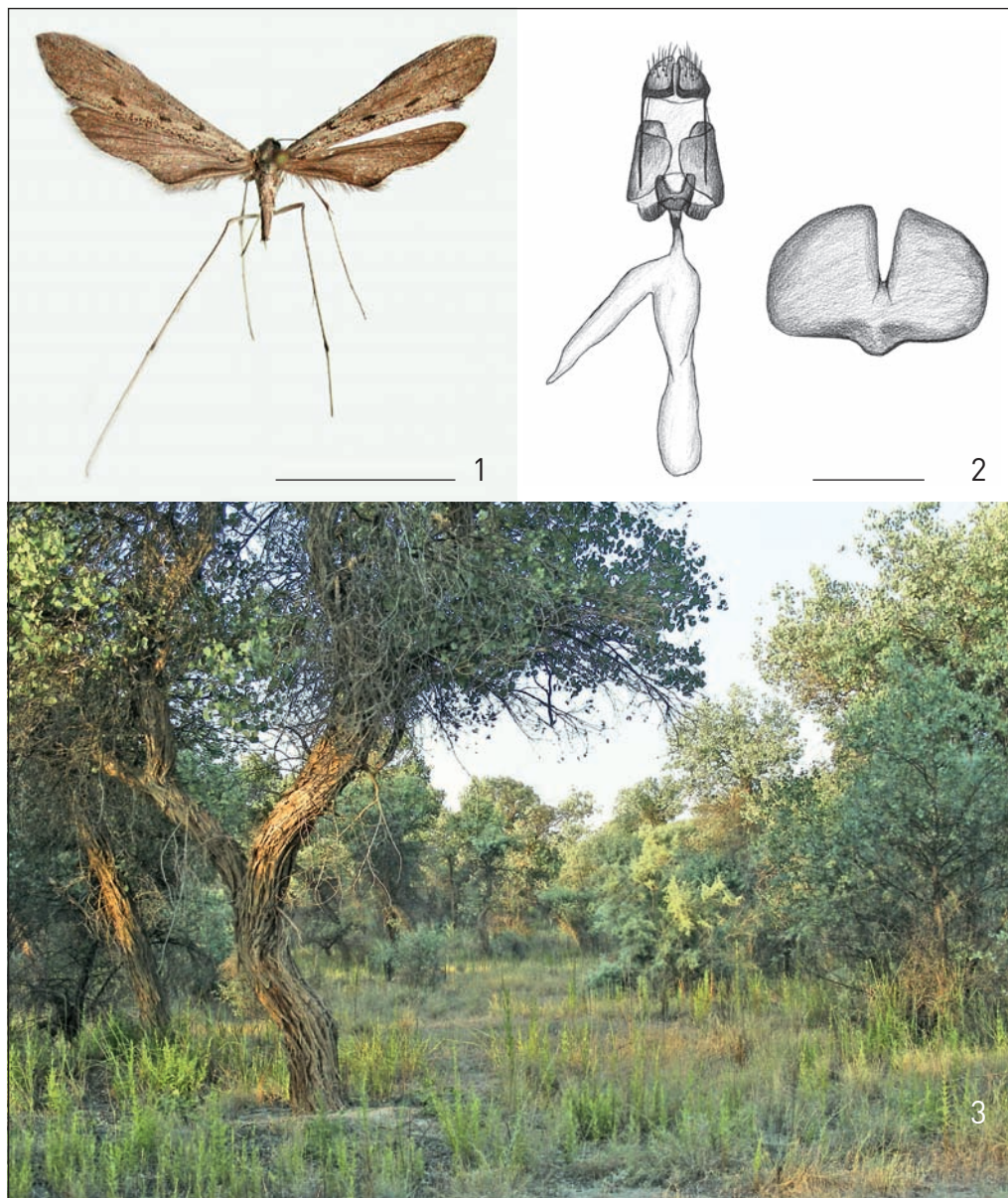
Members of the genus *Agdistis* Hübner [1825] occur in the whole Palaearctic and are especially found in coastal areas and in Central Asian steppes (Arenberger 1995). About 100 species of *Agdistis* are known to date (Gielis 2003). The knowledge on Central Asian Pterophoridae is still incomplete, but the information regarding the genus *Agdistis* was summarized by Arenberger (1995). Because some countries of the area can now be accessed more easily, their attraction increased and several descriptions of new species followed (e.g. Alipanah & Ustjuzhanin 2006; Arenberger 1995, 2002; Ustjuzhanin 2001; Zagulajev 1990, 1996). Here I describe a new species of the genus *Agdistis* found in southern Tajikistan, close to the Afghan border. The species can be recognized easily by the female genitalia. It occurs in the only remaining large *Populus diversifolia* Schrenk (Salicaceae) forest at the confluence of the Vakhsh and Panj rivers.

Agdistis tugai sp. n.

(Figs 1–3)

Material. Holotype ♀, ‘TJ [Tajikistan] Tigrovaya Balka | Karalyevskaya Dacha | E 68° 23’ 10” | N 37° 14’ 00”’, 316 m | 6./7.vii.2007 LF | leg. F. Altermatt’, ‘Holotype | *Agdistis tugai* Altermatt ♀ | det. F. Altermatt’. – Paratype: 1 ♀, ‘TJ [Tajikistan] Tigrovaya Balka | E 68° 24’ 35.9” | N 37° 14’ 29.8”’, 330 m | 5.vii.2007 LF | leg. F. Altermatt’, ‘Paratype | *Agdistis tugai* Altermatt ♀ | det. F. Altermatt’. The holotype and paratype are deposited in the NHMB.

Description. Adult female (Fig. 1). Alar expanse 26 mm, forewing length 14.5 mm. Head whitish to pale grey, frons creamy white with brown scales left and right of bulge. Labial palpus creamy white to greyish, posterior end of each segment with few brown scales. Antenna grey, proboscis well developed. Vertex creamy white to grey with few brown scales. Forewing not cleft, whitish to greyish white with brown scales, speckled. Central field homogeneously grey and slightly darker than rest of wing. Four brown costal markings: two most proximal markings well developed, two distal ones suffused and hardly visible. Four markings at dorsal margin of fold, 4th obliquely above 3rd, sometimes also fused. Cilia mostly white, dark grey on dorsal edge. Hindwing greyish,



Figs 1–3. *Agdistis tugai* sp. n. **1.** Holotype, female. Scale bar 10 mm. **2.** Female genitalia and 7th sternite. Scale bar 1 mm. **3.** Habitat: a tugai forest with *Populus diversifolia* trees and tamarisk shrubs (photo by T. Stalling).

plain-coloured. All legs whitish with brown scales; distal end of hindleg's 1st tarsomere brown. Caudal end of 7th sternite deeply carved.

Male. Unknown.

Female genitalia (Fig. 2). Apophyses anteriores absent. Apophyses posteriores long and slender, about 1.8 times length of papillae anales. Anterior third of papillae

anales conspicuously sclerotized. Antrum weakly sclerotized; caudal end (ostium) with two stub-shaped appendages fraying out at inner edge. Ductus bursae with weakly sclerotized collar. Corpus bursae without sclerites.

Diagnosis. *Agdistis tugai* sp. n. can be distinguished from most other *Agdistis* species by the absence of anterior apophyses, the weakly sclerotized antrum (exceptional in this genus) and the deeply carved 7th sternite. *Agdistis tugai* has only stub-shaped appendages on the antrum. The antrum of *A. tugai* is somewhat similar to the antrum of *A. mevlaniella* Arenberger, 1972, but the latter species has pronounced apophyses anteriores. The apophyses posteriores are relatively longer in *A. tugai* than in the recently described *Agdistis karakalensis* Zagulajev, 1990 (apophyses posteriores as long as papillae anales) and *Agdistis karabachica* Zagulajev, 1990 (apophyses posteriores about 1.2 times the length of papillae anales).

Habitat. A *Populus diversifolia* forest in Tigrovaya Balka. It is a typical riparian floodplain forest known as “tugai” where bushes of *Tamarix* sp. (Tamaricaceae) are common. Surrounded by steppe and desert and covering an area of about 50 km², Tigrovaya Balka is the largest remaining tugai forest. The forested area is officially protected (with the status of a “Zapovednik”) and lies close to a prohibited zone at the country border. Nevertheless, the forest is highly threatened by illegal logging and desertification.

Distribution. The two available specimens were collected at two close-by sites in the Tigrovaya Balka in south Tajikistan. The sites are located about 15 km north-north-east of the confluence of the Vakhsh and Panj rivers. The species might also occur in the neighboring countries of Afghanistan and Uzbekistan.

Life history. Unknown.

Etymology. The name is taken from the habitat type at the type locality, which is known as a “tugai” forest.

Faunistic remarks. I have collected one female of *Agdistis mevlaniella* Arenberger, one female of *Agdistis tamaricis* (Zeller), and one male of *Crombrugghia distans* (Zeller) at the same locality and date as the holotype. I have also collected one male of *Marasmarcha colossa* Chapman and two females of *Tabulaephorus maracandicus* Arenberger & Buchsbaum at another location west of Dushanbe (Sharinav/Chotsch, E 68° 25' 10", N 38° 27' 56", 1800 m; 2.vii.2007). All individuals were collected at a light trap (12 W) during the first half of the night.

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