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A new species of *Uromyces* from Turkey

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Abstract — A new species of *Uromyces* on *Myosotis* sp. (*Boraginaceae*) is described from Turkey. As far as is known, no *Uromyces* has previously been described on this host genus. *Uromyces myosotidis* sp. nov. is described and illustrated in this paper.

Key words —Anatolia, new taxon, *Puccineaceae*, *Basidiomycota*

Introduction

Among the approximately 351 species of rust fungi recorded for Turkey, 74 species and one variety of *Uromyces* have been reported (Bahcecioglu & Kabaktepe 2012). Recently, an unknown *Uromyces* specimen was collected in the country on *Myosotis;* it is described here as a new species, *U. myosotidis*.

Materials & methods

The host specimen was collected from Adıyaman Province in 2012, prepared according to established herbarium techniques, and identified from the relevant botanical literature (Davis 1965, 1978; Davis et al. 1988; Grau 1978). Spores were scraped from the dried host specimen and mounted in lactophenol. The preparations were examined with an Olympus CX31 light microscope. Analysis LS Starter software was used to measure at least 30 spores for each spore state. The specimen is preserved in the herbarium of Inonu University (INU), Turkey.

Taxonomy

Uromyces myosotidis Bahç. **sp. nov.** Fig. 1

MycoBank 804880

Differs from *Uromyces tairae* by its smaller teliospores and urediniospores.

Type: Turkey, Adıyaman Province, 10–12 km between Adıyaman and Celikhan, 1500–1600 m, on *Myosotis* sp. (*Boraginaceae*), 6 June 2012, Zeliha Bahcecioglu 3888 (**Holotype**, INU).

Etymology: from *Myosotis,* the host genus.

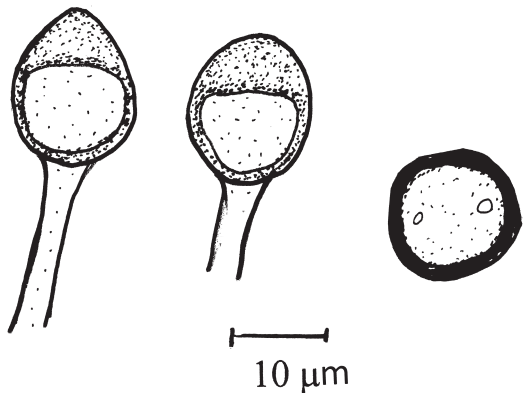

Fig. 1. *Uromyces myosotidis* (holotype). Teliospores and urediniospore.

Pycnia and aecia not seen. Uredinia and telia often mixed together, hypophyllous, covered by epidermis, small, scattered, brown. Urediniospores 14–16 × 13–16 µm globoid, subgloboid, walls 1.5–2 µm thick, brown, smooth or finely sparsely echinulate, with 2–3 equatorial pores. Teliospores 14–22 × 12–18 µm, globoid, subgloboid; walls ≤5–8 µm apiculus, dark brown, smooth. Pedicels ≤56 µm long, broken, hyaline.

Discussion

As far as is known, no *Uromyces* has previously been described on *Myosotis*. *Uromyces myosotidis* differs from *Uromyces* spp. determined on other genera of *Boraginaceae* in teliospore and urediniospore form and size. *Uromyces tairae* Hirats. f. on *Messerschmidia* (= *Tournefortia*) has larger teliospores (25–38 × 20–28 µm) and urediniospores (22–30 × 17–25 µm; Hiratsuka 1940). *Uromyces permeritus* Cummins and *U. dolichosporus* Dietel & Holw. on *Tournefortia* have ellipsoid, long fusiform, or long clavate teliospores (Holway 1897; Cummins 1940). *Uromyces heliotropii* Sred. on *Heliotropium* has larger teliospores (21–25 × 18–22 µm) with an apical pore (Ul'yanishchev et al. 1985; Kuprevich & Ul'yanishchev 1975).

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