

New records of Uredinales from Romania

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Abstract. *Puccinia campanulae* and *P. galanthi* are added to the Mycoflora of Romania, and *Uromyces dianthi* is recorded on a new host, *Dianthus leptopetalus*.

Key words: fungi, new records, Romania, Uredinales

Introduction

Some 439 species of Uredinales parasitic on 1279 host plants were recorded from Romania by Săvulescu (1953). The result of numerous, further additions are listed in Bontea (1985, 1986). However, no comprehensive list of Uredinales occurring in Romania exists. The correct estimation of the presence of these fungi in Romania is also hampered by the fact that the species concept used is, in most of the cases, narrow.

No rust fungus was recorded on *Galanthus* L. in Romania, whereas on *Campanula* L. only *Coleosporium tussilaginis* (Pers.) Berk. was indicated (Săvulescu 1953; Bontea 1985, 1986). Of the hosts recorded below, *Campanula lingulata* Waldts. & Kit. is a dacian-balkan-apanian element. It is a threatened species that occurs only in the southern Banat and in the western Oltenia. *Campanula persicifolia* L. is a continental element, common in Romania and the Balkan Peninsula. *Galanthus plicatus* Bieb. is a rare species, a pontic element found only in the northern Dobroudzha, in the Măcin Mts and the Babadag Plateau.

Materials and Methods

The specimens are deposited in the herbaria BUCM (Institute of Biological Research of the Romanian Academy) and I (Faculty of Biology Herbarium, Alexandru I. Cuza University of Iași). The determinations were made from

semi-permanent slides using lactophenol; teliospore surface morphology was examined in an SEM Tesla BS 300 (Figs 1-2). The nomenclature of rust species follows De Toni (1888), Sydow & Sydow (1904), Majewski (1979), and Denchev (1995), and the nomenclature of hosts *Flora Europaea* (Fedorov 1976; Webb 1980).

Results

Puccinia campanulae Carmich. ex Berk. in Sm., Engl. Fl. 5(2): 365, 1836. (Fig. 1)

Telia hypophyllous, rare epiphyllous, frequently found on the stalk and the petiole, dark brown, circular or irregular, often covered by the epidermis. **Teliospores** ellipsoidal or oblong, 26–36 × 15–21 μm, apex round or obtuse, constricted in the median part, at the base slightly round or sub-attenuated. Wall smooth, brownish yellow, 2–2.5 μm thick. Pedicel hyaline, filamentous and deciduous.

On the leaves of *Campanula lingulata* Waldts. & Kit. Distr. Caraș Severin, Baziaș, meadow in *Carpinetum orientalis*, 44°49'20" N, 21°22'24" E, alt. 120 m, 16 May 1979, G. Negrean (BUCM 53 628).

On leaves, stalks and petiole of *Campanula persicifolia* L. Distr. Buzău, Siriu, 45°30'02" N, 26°07'30" E, alt. 1000 m, 12 Aug 1972, G. Negrean (BUCM 81 390).

Puccinia galanthi Unger, Exanth. Pfl., p. 88, 1833. (Fig. 2)

Telia amphigenous, subepidermal, powdery, dark brown, spherical to elliptical, 6 μm diam, aggregate in concentric rings. **Teliospores** elliptical to oblong, base rounded

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Fig. 1. Teliospores of *Puccinia campanulae* Berk. in SEM. Bar = 10 μ m

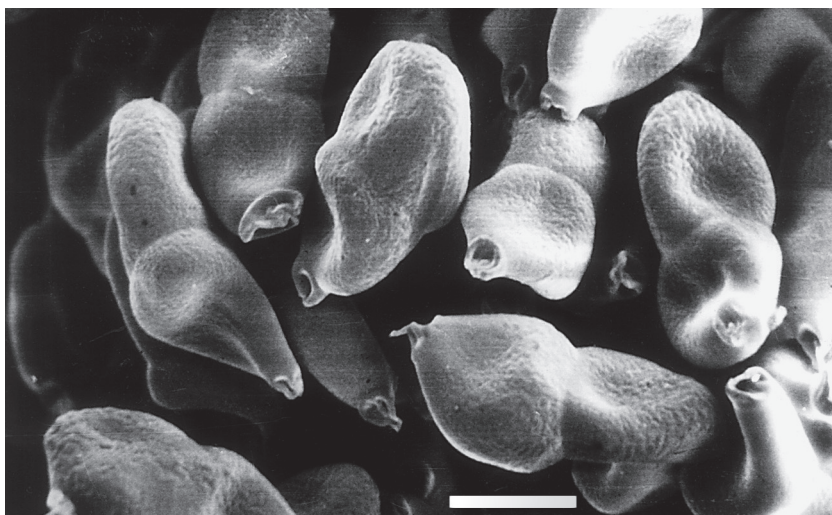


Fig. 2. Teliospores of *Puccinia galanthi* Unger in SEM. Bar = 10 μ m



to narrowing, 30-40 \times 21-27 μ m. Wall striate, dark brown, 2-3 μ m thick. Pedicel hyaline or yellowish, filamentous and deciduous.

On leaves of *Galanthus plicatus* Bieb. (*G. nivalis* auct. roman. nonn.). Distr. Tulcea, Mănăstirea Cocos, in *Carpinetum betuli*, 45°12'28" N, 28°24'55" E, alt. 200 m, 30 Apr 1983, G. Negrean (BUCM 76 260).

Uromyces dianthi (Pers.) Niessl

On the leaves, stalks and petiole of *Dianthus leptopetalus* Willd. Distr. Constanța, Eforie S, 44°02'15" N, 28°38'38" E, alt. 4 m, 26 Jun 1998, G. Negrean (BUCM 135 878); Distr. Constanța, Cotul Văii S, Valea Mare, 43°48'42" N, 28°20'10" E, alt. 70 m, 22 July 2001, G. Negrean (I 100 701).

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