

## GALIUM RUTHENICUM WILLD. IN FLORA OF ROMANIA

CIOCÂRLAN VASILE<sup>1</sup>

**Abstract:** A newly identified species in the vascular flora of Romania, namely *Galium ruthenicum* Willd. is published now. This taxa has been identified in Tulcea county, Dobrudja province. It is grown on sunny, rocky places. It is also mentioned the differences against *Galium verum* L., a morphologically close taxa in flora of Romania.

**Keywords:** *Galium ruthenicum*, features, ecology, distribution, Romania's flora

### Introduction

The genus *Galium* L. has 145 species in *Flora Europaea* [EHRENDORFER & KRENDL, 1976]. In Romania, the same genus *Galium* L. include 27 species [PAUCĂ & NYÁRÁDY, 1961]. Later on, there has been added other 9 species [CIOCÂRLAN, 2009]. Thus, in Romania's flora there are 38 species in the genus of *Galium* L.

There is added an other species in this *Galium* L. genus in this paper.

*Galium ruthenicum* Willd., Sp. Pl. 1: 597 (1798) (*G. verum* L. subsp. *ruthenicum* (Willd.) P. Fourn.) is a morphologically close to a common species in flora of Romania, namely de *G. verum* L. These two species, *Galium ruthenicum* Willd. and *G. verum* L., are distinguished by several features presented further on, but especially by their ecology and distribution area.

### Characteristics

The detailed description of *Galium ruthenicum* Willd. is made in *Flora of the USSR*, vol. XXIII [POBEDIMOVA, 1958]. The own characteristics of this species are like the next:

- leaves linear-filiforms, 7-8 in whorls (at *G. verum* the leaves are disposed as 8-12 in whorls), 25-30 mm long and 0.5 mm wide (at *G. verum* the leaves are of 0.5-1.5 (-2) mm wide);
- pedicels and especially the fruits have densely, harsh hairs (at *G. verum* the fruits are glabrous) (Fig. 1).

### Distribution and ecology

From distribution and ecology points of view, these two taxa are fundamentally different. *Galium verum* is a species with a wide area of distribution, as it is distributed in the whole area of Eurasia. It is grown from the sea level to ca 1200 m.

*Galium ruthenicum* is a pontic species, growing in steppic areas, often in rocky places.

<sup>1</sup> University of Agronomical Sciences and Veterinary Medicine, 59 Mărăști Av., 011464, Bucharest – Romania

#### **GALIUM RUTHENICUM WILLD. IN FLORA OF ROMANIA**

In Europe, *Galium ruthenicum* is distributed in Russia of SE, Ukraine, R. of Moldova [STANKOV & TALIEV, 1949; MAIEVSKII, 1954; POBEDIMOVA, 1958; GEIDEMAN, 1954; ZEROV, 1965].

In România, *Galium ruthenicum* has been identified in Dobrudja, Tulcea county, on a stony hill, ca 2 Km North of Făgărașul Nou village.

Accompanying species:

*Achillea leptophilla,*  
*Allium guttatum,*  
*Cleistogenes bulgarica,*  
*Hieracium echioides* subsp. *procerum*,  
*Moehringia grisebachii* (on rocks, only)  
*Onobrychis arenaria,*  
*Seseli pallassii,*  
*Stachys angustifolia,*  
*Veronica spicata* subsp. *barrielieri*.

Voucher specimens were deposited in the Herbarium BUAG, sheet no. 23947.

#### **References**

1. CIOCÂRLAN V. 2009. *Flora ilustrată a României. Pteridophyta et Spermatophyta* (ed. III). Bucureşti: Edit. Ceres, 1138 pp.
2. EHRENDÖRFER F. & KRENDL F. 1976. Genus *Galium* L., In *Flora Europaea*, **4**. Cambridge: Cambridge University Press.
3. GEIDEMAN T. 1954. *Opredelitel' Rastenii Moldavskoi SSR*. Moskva - Leningrad.
4. MAIEVSKII. 1954. *Flora Srednei Polosâ Evropeiskoi Časti SSSR*. Leningrad.
5. PAUCĂ A. & E. I. NYÁRADY. 1961. Genul *Galium* L., în *Flora R. P. Române*.
6. POBEDIMOVA E. 1958. Genus *Galium* L., In *Flora U. S. S. R.*, **XXIII**. Moskva - Leningrad.
7. STANKOV S. & TALIEV V. 1949. *Opredelitel' vásárhely Rastenii Evropeiskoi Časti SSSR*. Moskva.
8. ZEROV D. et al. (ed.). 1965. *Viznacínik Roslin Ukrainských*, Ed. 2. Kiev.



**Fig. 1.** *Galium ruthenicum* Willd. (original)