

## *Asperula laevigata* (Rubiaceae) – a new species to the flora of Romania

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**Abstract.** *Asperula laevigata*, a Mediterranean species, is reported for the first time to the flora of Romania. It has four ovate leaves in a whorl, scabrous margins and aculeolate midrib, distinctly abaxial. The location of the species is in Southwestern Romania, on two hills near Reșița town.

**Key words:** *Asperula laevigata*, Romania

### Introduction

In 1995, the first author received herbarium material from Mr. Ilie Goga<sup>1</sup> for checking and identification. Among the specimens received there was one of *Rubiaceae*, with juvenile flowers, reminding of *Galium rotundifolium* L. by habit, without identifying with it, however. Examining some more materials, presented also by the second author, it was determined as *Asperula laevigata*, a Mediterranean species new to the flora of Romania.

### Material and methods

The identification of this species was done using the data from the literature (Halacsy 1901; Rouy & Camus 1901; Fiori 1925; Hayek & Markgraf 1931; Coste 1937; Stojanov & al. 1967; Gajic 1973; Ehrendorfer & Krendl

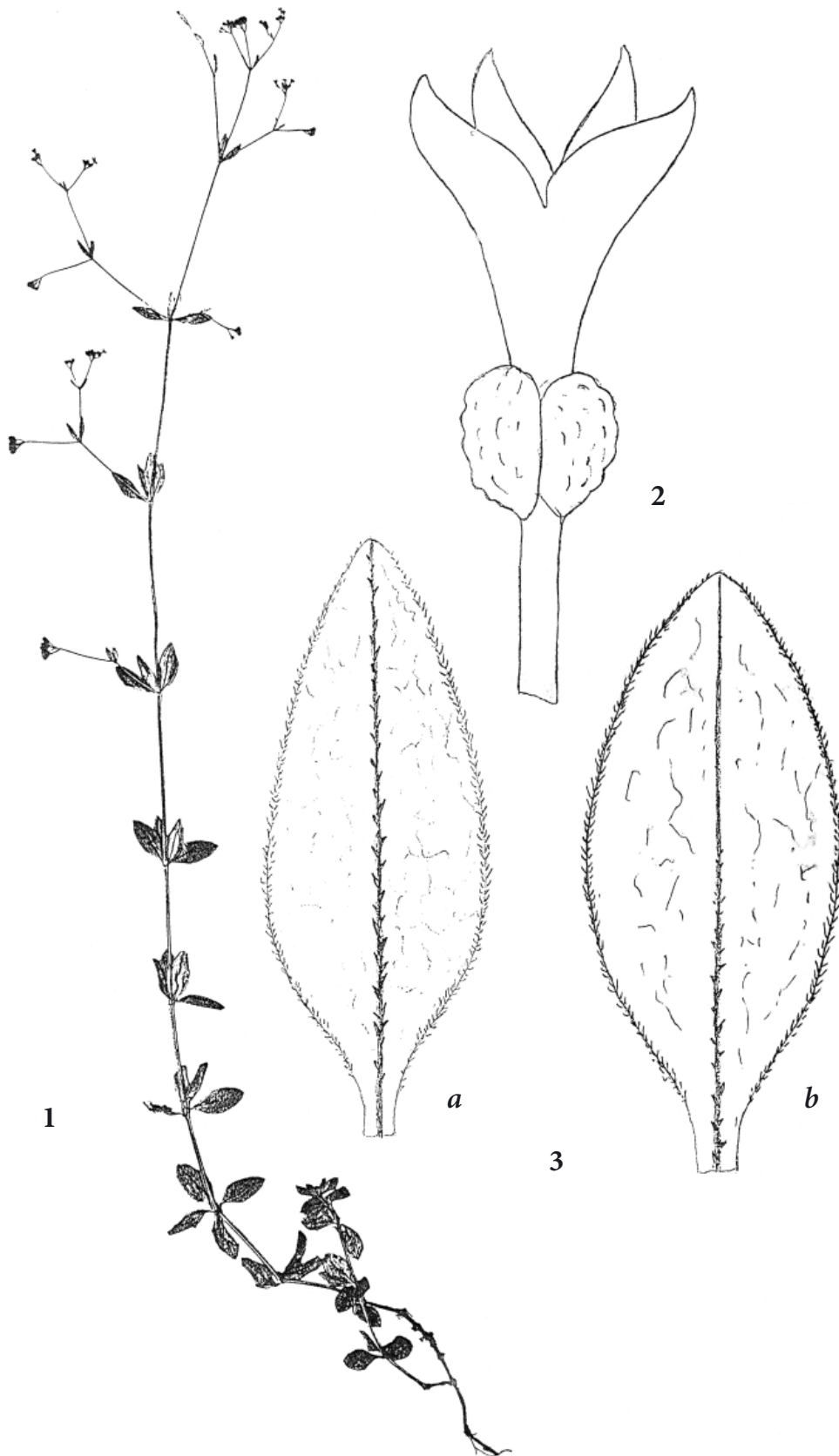
1976). The herbarium materials examined and determined are deposited in BUCA (No. 155476, 155477, 155676, 155677). The illustration is original.

### Results and discussion

*Asperula laevigata* L., Mantissa, 38 (1767) (Fig. 1)

The plant is perennial, stoloniferous, does not turn black when it dries. Stems rather short, 25–35 (40) cm, ± scending to erect, branched from the base, thin, tetragonal, glabrous, smooth and shiny. Leaves number four in verticil, the central ones 9–18 × 3.5–8 mm, ovate or elliptical, visibly attenuated petioloform at the basis, obtuse and muticous, uninerve, but with a fine network of lateral nervures, scabrous and slightly curved back at the margins, visibly shorter than the internodes. Nervure is aculeolate on both sides, distinctly abaxial, character (diagnema) not mentioned in the consulted literature. It ends at the tip of the leaf with a whitish-green macula. Bracteoles often end with a longer hair. Pedicels are capillary, 0.75–1.0 mm long. Flowers white, small, in axillary and terminal cymas, forming a lax, foliate panicle. Corolla 1.75 mm long,

<sup>1</sup>Mr. Ilie Goga is a passionate self-taught botanist, well known in Romania, collector of plants and botanic literature; he published several field papers. The discovery of *A. laevigata* is a proof of his skills.



**Figs 1-3.** *Asperula laevigata*:  
1, habit; 2, flower ( $\times 30$ ); 3, leaves: *a* – ovate, abaxial; *b* – elliptical, adaxial ( $\times 10$ ).

infundibuliform, glabrous; tube 1 mm long, equal or slightly longer than the lobes (0.75 mm long). Anthers yellow, included in the corolla, almost sessile. Ovary 0,8 mm. Fruits glabrous, granulate.

*Galium rotundifolium*, which it resembles, has trinerve, acute leaves, terminal inflorescence, rotate corolla, and fruit with uncinat hairs.

The material examined did not fit exactly the descriptions in literature, because the nervure of the leaves was not mentioned with aculeoli (small prickles) on both sides, more obvious upwards to the tip of the abaxial face, but Dr Corrado Tietto (Italy) informed us that the material from Italy, too, had such diagnema.

Distribution in Romania: Caraş-Severin county, at Reşita town, on Chica hill, on mountain hay meadows (coll. I. Goga, 22–23.06.1980) and on Carşiei hill, on pasture land (coll. I. Goga, 17.07.1982). It grows at the northeastern limits of the area, probably having a relict character.

A Mediterranean species known from Spain, France, Italy, Croatia, Albania, Greece, the Mediterranean islands – Baleares, Corse, Sardegna, Sicilia (Ehrendorfer & Krendl 1976), Tunisia and Algeria (Halacsy 1901; Coste 1937). We cannot specify precisely in which of the former Yugoslav Republics this species grows, because Hayek & Markgraf (1931) indicated it on the current Croatian territory, but Domac (1967) did not mention it.

*Asperula laevigata* was included in the manuscript of Red Book of *Tracheophyta* from Romania (pers. comm.).

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