

## THE VARIABILITY OF *CEPHALARIA URALENSIS* (MURRAY) ROEM. ET SCHULT.

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**Abstract:** The variability of *Cephalaria uralensis* (Murray) Roem. et Schult., incl. subsp. *dobrogensis* Ciocârlan, subsp. nova, and an identification key, are presented in this paper.

**Keywords:** *Cephalaria uralensis*, variability, features, ecology, distribution, Romania's flora

### Introduction

*Cephalaria uralensis* (Murray) Roem. et Schult. is a Pontic–Balkan species, distributed in Russia (C, W, E, Crimea), Bulgaria, Romania, Serbia, and, probable, in Greece [FERGUSON, 1976].

This species is distributed in Transylvania, Banat, Oltenia, Muntenia, Moldavia, Bucovina, and Dobrudja [OPREA, 2005].

As ecology, it is a xerophyllous species, growing on dry and sunny places, but also on rocky substrates.

### Material and methods

Data on the variability of *Cephalaria uralensis* (Murray) Roem. et Schult. exist in flora of Serbia, only [DIKLIC, 1973], where are given two varieties, as: var. *uralensis* and var. *puberula* (Adamović) Diklić.

In *Flora of R. P. Române*, vol. VIII [PRODAN, 1961] it is given a form, namely f. *obtusilaciniata* Räv.

In *Conspectus Florae Romaniae* [BORZA, 1949] there is given an other forms, namely: f. *dentata* Schur, f. *intermedia* Schur, and f. *tenuisecta* Schur.

In *Flora of R. S. România*, vol. XIII [BELDIE & VACZY, 1976] there is given a subspecies, namely subsp. *multifida* (Roman) Roman et Beldie.

This last taxa, *Cephalaria uralensis* (Murray) Roem. et Schult. subsp. *multifida* (Roman) Roman et Beldie is worth to be noted, being an endemite in Romania's flora (neoendemite), registered in *Flora of R. S. România*, vol. XIII [BELDIE & VACZY, 1976]. Also, this taxa is included onto the *Romanian Red List* [OLTEAN & al. 1994].

Unfortunately, this taxa is missing in the Romanian Red Book [DIHORU & NEGREAN, 2009].

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**Results and discussions**

The author of this paper discovered a new taxa in the flora of Dobrudja (South-East Romania) is presented further on.

*Cephalaria uralensis* (Murray) Roem. et Schult. subsp. *dobrogensis* Ciocârlan, subsp. nova [BARANOV, 1971].

Perennial plant, with a stem of 30-60 cm in height; leaves opposed, penately-sectate, with 5-8 pairs of lanceolate segments, entirely, small, 0.8-1.2 cm long, decurrents; head of flowers of 0.8-1 cm in diameter; the outer calyx has pretty small and uniform teeth; the achenes are tetragonal, of 4.5-5 mm long, hairy (Fig. 2 – habitus and fruits).

**The habitat:** this subspecies is growing on dry, rocky places, between 100 and 400 m. s. l.

**Spread:** Alah-Bair hill (near Băltăgești village, Constanța county) and on the Pietrosul hill (near Agighiol village, Tulcea county).

**Holotypus:** in herbarium BUAG – University of Agricultural Sciences, Bucharest, conservatur also in herbarium I (University “Alexandru Ioan Cuza” of Iași, Romania) as isotypus.

The differential characteristics of this new taxa (subsp. *dobrogensis* Ciocârlan, subsp. nova) against the type subspecies (subsp. *uralensis*) and subsp. *multifida* (Roman et Beldie [ROMAN, 1971]), are given in the next dichotomic key of identification:

- 1a Basal leaves with 2-4 (-5) pairs of entire segments, the terminal one being larger. The outer calyx has 4 long teeth and other 4 intermediately and very short teeth. ....subsp. *uralensis* (Fig. 1 - habitus and fruits)
- 1b Basal leaves with more than 5 pairs of segments. The outer calyx with uniform and very small teeth ..... 2
- 2a Stem of 30-60 cm height; basal leaves with 5-8 pairs of entire segments, small, 0.8-1 cm long; achenes of 4.5-5 mm long. ....subsp. *dobrogensis* (Fig. 2 - habitus and fruits)
- 2b Stem of 50-150 cm height; leaves with 8-12 (-14) pairs of linear segments, lobulately; achenes to 10 mm long .....subsp. *multifida*

**Obs.:** *Cephalaria uralensis* subsp. *dobrogensis* and *C. uralensis* subsp. *multifida* are morphologically similar to *C. media* Litv., an endemic species distributed in Caucasus region [BOBROV, 1957].

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**Fig. 1.** *Cephalaria uralensis* subsp. *uralensis* – plant habitus and fruits (original)



**Fig. 2.** *Cephalaria uralensis* subsp. *dobrogensis* – plant habitus and fruits (original)

