

## GENUS *ACHILLEA* L. (*ASTERACEAE*) IN REPUBLIC OF NORTH MACEDONIA

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### Abstract

The genus *Achillea* L. comprises more than 50 species in Europe, with more than 43 species in the Balkans. In Republic of North Macedonia is represented with the 17 species. Most species of genus *Achillea* L., are beautiful, fragrant and medicinal, therefore it is suitable and interesting to cultivate them in botanic gardens or close to pharmaceutical or medicinal enterprises. In this study the most interesting species are analysed, rare and endemic in the Balkans. One of them is also *Achillea clavennae* L., which is represented by three varieties: *var. argentea*, *var. intercedens* and *var. clavennae*. *Achillea clavennae* L., *var. clavennae* Hayek (*Asteraceae*) is presented in Albania, Kosovo, Republic of North Macedonia, Slovenia (Martinčič A., Wraber T., Jogan N., Ravnik V., Podobnik A., Turk B., Vreš B., 1999), Croatia, Bosnia and Herzegovina, Serbia, Montenegro and Greece. From the current knowledge of flora in Macedonia *Achillea clavennae* L., *var. clavennae* Hayek (*Asteraceae*) is presented only in Galičica. Those species are recorded for the first time in Cerovo and were recognized which represents a new locality of distribution of those species in the flora of Republic of North Macedonia.

**Keywords:** *Asteraceae*, *Achillea* sp., new locality, Republic of North Macedonia.

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### 1. Introduction

The genus *Achillea* L. is one of the most prevalent genus of the *Asteraceae* family. Includes more than 100 species [6, 8]. The genus *Achillea* L. comprises more than 50 species in Europe, with more than 43 species in the Balkans. In Republic of North Macedonia is represented with the 17 species [1]. The genus *Achillea* L. in Albania is represented with 18 species, while in Kosovo with 17 species. Most species of genus *Achillea* L., are beautiful, fragrant and medicinal, therefore it is suitable and interesting to cultivate them in botanic gardens or close to pharmaceutical or medicinal enterprises. In this study are analysed the most interesting species, rare and endemic in the Balkans [5]. One of them is also *Achillea clavennae* L., which is represented by three varieties: *var. argentea*, *var. intercedens* and *var. clavennae*. *Achillea clavennae* L., *var. clavennae* Hayek (*Asteraceae*) is presented in Albania [9], Kosovo [7], Republic of North Macedonia, Slovenia, Croatia, Bosnia and Herzegovina, Serbia [5], Montenegro and Greece.



**Figure 1.** *Achillea clavennae* L. *var. clavennae* Hayek

From the current knowledge of flora in Macedonia *Achillea clavennae* L., var. *clavennae* Hayek (*Asteraceae*) is presented only in Galičica. Those species are recorded for the first time and in Cerovo and were recognized which represents a new locality of distribution of this species in the flora of Republic of North Macedonia.

## **2. Material and Methods**

For the realization of this study are applied standard methods for floristic research. Such studies involve the identification of individual species and also the assessment of abundance of species. The techniques applied are known as floristic methods of description. Specimens of these species are deposited in the Department of Biology, University of Tetova.

## **3. Results and Discussion**

According to investigation in the terrains and according to the literature (Funk V. A., Susanna A., Stuessy T. F., and Robinson H., 2009), the following species of *Achillea* L. have been noted in the Republic of North Macedonia: *Achillea abrotanoides* Vis., *Achillea ageratifolia* (Sibth. et Sm.) Boiss., *Achillea chrysocoma* Friv., *Achillea clavennae* L., *Achillea clypeolata* Sibth. et Sm., *Achillea coarctata* Poiret in Lam., *Achillea crithmifolia* Waldst. et Kit., *Achillea grandifolia* Friv., *Achillea lingulata* Waldst. et Kit., *Achillea millefolium* L., *Achillea nobilis* L., *Achillea ptarmica* L., *Achillea atrata* L., *Achillea depressa* Janka., *Achillea tanacetifolia* All., *Achillea serbica* Nyman, *Achillea clusiana* Tausch. Most species of the genus *Achillea* L. are characterized by polymorphism. The most expressive polymorphisms have the species: *Achillea millefolium* L., with three subspecies (subsp. *pannonica*, subsp. *millefolium* and subsp. *collina*), *Achillea clavennae* L., with three varieties (var. *argentea*, var. *clavennae* and var. *intercedens*), *Achillea atrata* L., with two subspecies (subsp. *atrata* and subsp. *multifida*), *Achillea nobilis* L., with two varieties (var. *nobilis* and var. *ochroleuca*), *Achillea crithmifolia* Waldst. et Kit., with two varieties (var. *crithmifolia* and var. *dörfleri*), *Achillea tanacetifolia* All., with three subspecies (subsp. *tanacetifolia*, subsp. *stricta* and subsp. *distans*).



**Figure 2.** *Achillea nobilis* L. var. *nobilis* Rchb

#### **4. Conclusions**

Based on what was said above, we can conclude that:

- The genus *Achillea* L., is one of the most prevalent genus of the *Asteraceae* family, and in Republic of North Macedonia is represented with the 17 species.
- The most expressive polymorphisms have the species: *Achillea millefolium* L., *Achillea clavennae* L., *Achillea atrata* L., *Achillea nobilis* L., *Achillea crithmifolia* Waldst. et Kit., and *Achillea tanacetifolia* All.

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