

Some Dendrological Phenomena in Mavrovo National Park, North Macedonia

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Abstract: This research relates to occurrence of some morphological and ecological features of native woody plants in Mavrovo National Park situated in north-western Republic of North Macedonia on an area of about 73,000 ha. The Park represents more than 45% of the dendroflora and nearly 19% of the forest communities in the country. The observations were done during the past fifteen years covering different aspects of both individual and social life of the dendroflora, and various ecological conditions. In this context, dozen dendrological phenomena were found to be important to note. Namely, very old individual trees of the Balkan endemic species and Arcto-Tertiary relic of horse chestnut (*Aesculus hippocastanum*) thriving as riparian population were found; old European hop-hornbeam (*Ostrya carpinifolia*) individuals on remote sites; old Austrian pine (*Pinus nigra*), and sycamore (*Acer pseudoplatanus*) trees; old groves of common ash (*Fraxinus excelsior*), and of Austrian pine; firs (*Abies borisii-regis* and *A. alba*) with form of smooth or rough bark and aggressive territorial expansion on thermo-mesophilic sites. European beech (*Fagus sylvatica*) with oak-bark form ('quercoides') also was found. Furthermore, the occurrence of the hemiparasite juniper dwarf mistletoe (*Arceuthobium oxycedri*) on savin juniper (*Juniperus sabina*) was identified. In addition, finding site of *Cotoneaster parnassicus* was found. A few phenomena were observed concerning the spruce-fir forest community (ass. *Abieti-Piceetum scardicum*): dieback of Norway spruce individuals (*Picea abies*), emergence of Balkan pine (*Pinus peuce*) initial population in the vicinity and presence of barberry (*Berberis vulgaris*) as steppe floral element together with expressed mesophilic species.

Keywords: Woody species, Phenomena, Mavrovo.