

CONTRIBUTION TO THE DENDROLOGIC DIVERSITY IN THE FOREST OF NATIONAL PARK "FRUSKA GORA" IN SERBIA

Milun Krstić, Rade Cvjetičanin, Violeta Babić, Branko Kanjevac

Faculty of Forestry, University of Belgrade – Kneza Visislava 1, 11030 Belgrade, Serbia



INTRODUCTION AND BASIC CHARACTERISTICS OF THE OBJECT OF STUDY

The paper presents results of the dendrologic diversity study in the National Park "Fruska Gora" in Serbia, which is, according to IUCN criteria classified in category V protection.

Fruska Gora is an island mountain in the northern part of Serbia, Vojvodina region, in the plain between the rivers Danube and Sava. The length of the mountain is about 80 km, and maximum width is about 15 km. The highest peak is Crveni Cot (539 m a.s.l.). The most common bedrocks are schist and serpentinite, while low slopes are covered with loess deposits. Fruska Gora have a direction west-east, so the entire length is exposed to cold air currents that stream from the northern quadrant. It belongs to the area of moderate continental climate.

The total forest area of the National Park is 25,548 ha. Covered area of state forests is 22,518 ha. Dominantly are represented coppice forests with 80.3%: preserved forests with 70.5%, diluted has 8.3%, and devastated forests, only 1.5%.



IN THE STATE FORESTS ARE DEFINED THREE LEVELS OF PROTECTION

Protection Zone - I degree includes areas of special natural features, nature reserves, natural monuments, other objects of protection, and occupies 4.6% of the total forest area;
Protection Zone - II degree includes the natural landscape of the continent, coastal protection forests, forest park, seed stands, etc., and occupies 81.6% of the surface;
Protection Zone - III degree includes area for tourism, recreation and other forest area and occupies 13.8% of the area.



DENDROLOGIC DIVERSITY IN THE FOREST

In the forests of the National Park is expressed the diversity of forest vegetation since it is allocated to the 65 eco-vegetation units (Jović N. et al., (1985-1988). There is pronounced the diversity of trees and shrubs, because there are registered 54 species of trees, from which 41 are autochthonous species. Silver lime (*Tilia tomentosa* Moench.), which is coppice origin, is dominant with 37,6% by volume, and after that the oaks are most represented: sessile oak (*Quercus petraea* Liebl/Matt./.) with 18.8% and Turkey oak (*Quercus cerris* L.) with 11.1%. Other native tree species such as beech (*Fagus sylvatica* ssp. *moesiaca* / Mally / Szafer), hornbeam (*Carpinus betulus* L.), common oak (*Quercus robur* L.), pubescent oak (*Quercus pubescens* Willd.) and black ash (*Fraxinus ornus* L.) are represented less than 10%, and all others species less than 1%. Diversity is characterized by the presence of noble deciduous trees and numerous shrub species. During the development these forests were under different anthropogenic influence so there is a large number of allochthonous species of trees, among which is the most common black locust (*Robinia pseudoacacia* L.).

FUTURE SILVICULTURAL WORK

For all future silvicultural work in this area it is necessary to take care of diversity of autochthonous trees and shrubs and native flora of this important facility of nature.