PRODUCTIVITY ASSESSMENT OF THE FESTUCO - BROMETEA CLASS GRASSLAND PHYTOCOENOSES EXISTING IN THE SOUTH MEHEDINȚI PLATEAU AND THE IRON GATES NATURAL PARK

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Abstract. *The Southern Mehedinți Plateau and Iron Gates grasslands from Romania, from a phytosociological point of view, belong to the Festuco-Brometea class with xerophilous vegetation. They are spread over an altitudinal difference of 70-630 m in the Mehedinti Plateau and 70-320 m at the Iron Gates, with the Danube River as the lower limit. They are mostly located on average slopes of 31 degrees of inclination, on sunny exposures. In the grassy carpet, on average, 81 species of cormophytes were recorded in the 12 phytosociological associations, of which Danthonio-Chrysopogonetum grylli with 155 species and Fumano - Stipetum (eriocaulis) praemoesicum with 110 species are distinguished. The average degree of vegetation cover is 70%, of which 20% are forage species and 50% harmful species, with no forage value. Average production of green mass production is 2.42 t/ha, with variation from 1.46 t/ha in the associations in the south of Mehedinți Plateau, to 4.32 t/ha at Iron Gates. The grasslands productivity in the area taken in the analysis is lower than in Dobrogea, respectively, by 68% for the green mass production and barely 39% for the pastoral value. As a result, the cow's milk production possible to obtain in Dobrogea is 2,720 litters/ha, 254% higher than that of the analyzed area, where it is estimated a milk production of 1,070 litters/ha in 160 days of the optimal grazing season. These data on the grasslands production and quality further serve to draw up the pastoral arrangements and grasslands management.*

Keywords: *Festuco-Brometea* class, grasslands, pastoral value, green mass production, milk production.

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