

## THE PRODUCTIVITY ASSESSMENT OF THE CRIȘURILOR PLAIN GRASSLANDS

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**Abstract.** *The grasslands of Crișurilor Plain, the portion between Crișul Negru and Crișul Repede, located on flat lands with normal soils and different stages of salinity, generally have a lower productivity and biodiversity. The average number of cormophyte species is 50 with variations from 16 in *Camphorosmetum annuae* and *Polygano-Plantagininetum tenuiflorae*, to around 90 in *Festucetum valesiacae*, *Artemisio* and *Achilleo - Festucetum pseudovinae*. The overall vegetation cover is 86% with 44% forage species and 42% harmful species. The average pastoral value (PV) of the 18 associations is 30.8 (mediocre), the highest was 75.7 (good) in *Lolietum perennis* and the lowest 2.0 (degraded) in *Camphorosmetum annuae*. The average production of green mass (GMP) was evaluated at 5 t/ha with very large differences between the associations. At phytosociological alliances level, *Festucion rupicolae* (47.6 PV and 8.18 t/ha GMP) and *Beckmanion erucaeformis* (42.5 PV and 9.04 t/ha GMP) had the highest productivity and *Cyperio - Spergularion* (3.6 PV and 0.29 t/ha GMP) had the lowest. Finally, the productivity evaluation was done at the level of normal and degraded Natura 2000 Habitats (6440, 6240 and 1530). Habitat 6440 normal was rated at 65.7 PV (good) and 13.09 t/ha GMP, which allows for an optimal loading of 1.26 LU/ha (good). The worst results had the Habitat 1530 (degraded) with 5.7 PV and 0.51 t/ha GMP with the most saline soils and irrational use of grasslands. The results of these productivity evaluations of grasslands based on floristic surveys continue to serve for the preparation of pastoral arrangements and their proper management.*

**Keywords:** lowland grasslands, pastoral value, green mass production, grazing capacity

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