

STUDY OF THE BEHAVIOR OF SOME SIMPLE MIXTURES OF GRASSES AND PERENNIAL LEGUMES UNDER CLIMATE CHANGE CONDITIONS

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Abstract

Romania has over 4.8 million hectares of permanent grasslands. Permanent grasslands contribute little to animal feed compared to temporary grasslands because they are of poor quality and produce low yields without proper management. Sown temporary grasslands are a good alternative to degraded or deteriorating permanent grasslands, providing high-quality feed in terms of both quantity and quality. To establish the relationship between species in a given pedoclimatic area, periodic research is required to develop and standardize new mixtures of perennial grasses and legumes. This experiment was conducted at the Ezăreni farm of the University of Life Sciences from Iasi. Observations within the sown variants focused on the number of shoots per m², plant height at harvest and dry matter production per hectare. In the first year of vegetation, a single mowing was performed, and yields ranged from 2446.1 kg/ha for variant a₆ to 4653.0 kg/ha for variant a₁. The average number of shoots/m² in the first year of vegetation ranged from 632 shoots/m² in variant a₁ to 2,757 shoots/m² in the case of the mixture variant a₉. In the first year of vegetation, high yields were recorded in the variants where *Onobrychis viciifolia* Scop. accounted for more than 50% of the crop.

Keywords: (temporary meadows, productivity elements, plant height, number of shoots, yield)