INTEGRATED FERTILIZATION AND OVERSEEDING IMPROVE PERMANENT GRASSLAND PRODUCTIVITY AND FORAGE QUALITY IN THE MOLDAVIAN PLATEAU

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Abstract

This study evaluated four permanent-grassland management variants in the Moldavian Plateau during 2026: an unfertilized control, organo-mineral fertilization, intensive organic fertilization, and moderate organic fertilization combined with overseeding. Botanical composition was assessed by geobotanical relevés, pastoral value by species cover and forage-quality indices, green-mass yield by repeated cuts, and proximate composition by standardized methods. The integrated treatment produced the highest pastoral value (83.00), green-mass yield (10,073 kg ha−1), dry-matter yield (2.015 t ha−1), and crude protein concentration (16.20% DM), while crude fibre declined to 24.80% DM. Relative to the control, green-mass yield increased by 70.41%. Fertilization alone improved the sward, but combining manure with overseeding delivered the most balanced gains in botanical structure, productivity, and forage quality.

Key words: *permanent grassland, overseeding, manure, pastoral value, forage quality*