## THE BEHAVIOUR OF SOME MIXTURES OF PERENNIAL GRASSES AND LEGUMES EXPLOITED IN MIXED REGIME UNDER CENTER OF MOLDOVA CONDITIONS

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## Abstract

For the establishment of temporary meadows it is envisaged choosing the most suitable species of perennial grasses and legumes, with high adaptability to the use procedure planned for the cultivated area. In most temporary meadows changes occur in the floristic composition of the vegetation cover, determined by the use procedure, the aggression of the species from the mixtures and the climatic conditions evolution. The studies have followed the evolution of the vegetation cover under the influence of mineral fertilization and the used mixture. The researches were conducted during 2013 - 2014, in the Agricultural Research – Development Station Secuieni, Neamt county, where it was followed the influence of four doses of nitrogen on a phosphorus agri fund at an experience formed of three mixtures of perennial grasses and legumes used in mixed regime. The obtained results showed that the use period of the studied mixtures was of 168 days, and the grasses were prevailing in the vegetation cover at each harvest, with a participation percentage that manifested a slightly decreasing trend. The highest yield, of 13.04 t/ha d.s., was recorded at the mixture formed from Dactylis glomerata 60% + Lolium perenne 25% + Lotus corniculatus 15%, fertilized with N<sub>80</sub>P<sub>40</sub>, and the lowest one, of 6.08 t/ha d.s., was obtained in the same mixture, in the unfertilized variant, which highlights the need of fertilization of the temporary meadows for production intensification.

Key words: fertilization, grasses, legumes, mixtures.