## RESEARCH REGARDING THE BEHAVIOUR OF SOME PERENNIAL GRASSES AND LEGUMES MIXTURES IN ORDER TO ESTABLISH TEMPORARY GRASSLAND EXPLOITED IN MEADOW REGIME

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## Abstract

In making perennial grasses and legume mixtures is envisaged that the species or varieties used to properly reflect the stationary conditions, the annual climatic variations sometimes influence different the components behavior, and therefore the productivity. The researches were conducted during 2013-2015 in the Agricultural Research - Development Station Secuieni, where was followed the influence of four nitrogen doses on a phosphorus agrofond in an experience of five mixtures of perennial grasses and legumes used in meadow regime. The nitrogen fertilizers are used in smaller doses in mixtures, because this element is provided by symbiotic bacteria living on the roots of legumes. The results showed that the dynamic of biomass accumulation was done in three growth cycles, for the first cycle it took 53 days, for the second cycle 42 days and for the third cycle 52 days. The highest production of 24.03 t/ha dry substance it was recorded at Festuca arundinacea 30% + Dactylis glomerata 20% + Festuca pratensis 20% + Medicago sativa 20% + Trifolium pratense 10% mixture and fertilized with N<sub>80+40</sub>P<sub>40</sub> dose, and the lowest of 14.59 t/ha d.s. was obtained at Dactylis glomerata 30% + Lolium perene 40% + Medicago sativa 20% + Lotus corniculatus 10% mixture in the unfertilized variant.

Key words: mixtures, perennial grasses, perennial legumes