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**FORMATION OF LEAF-STEM MASS YIELD OF ALFALFA
DEPENDING ON THE MOWING ROUTINES GRASS STAND
AND FERTILIZER LEVEL
AT CONDITIONS OF THE RIGHT-BANK FOREST-STEPPE**

The results of investigations about formation of alfalfa grass stands different geographical origin in the year of sowing and the first year of its use in the phase of budding, beginning and complete flowering and their alternation for mowings during the vegetation period depending on the level of mineral and organic fertilizers in the soil-climatic conditions of the of the Right-bank Forest-Steppe are given.

The investigated varieties of alfalfa reacted differently to fertilizer types, especially after alienation of grass stand (the first mowing) in the phase beginning – full flowering, where the most effective were phosphate-potassium fertilizers for Rosana and Banat varieties, which ensured practically the same yield of leaf-stem mass (15,40–16,52 t/ha), compared with other alfalfa ecotypes.

It was established that in the first year of vegetation the alfalfa varieties, such as Banat and Rosana, for two mowings on average ensured yield of leaf-stem mass at the level of 28,35–29,80 t/ha for phosphoric-potassium mineral nutrition, or by 24,7–33,5 % more than Unitro, Nasaloda and Bride of the North varieties.

For the use of organic and organo-mineral fertilizers received lower yields of leaf-stem mass in the range of 23,56–23,74 t/ha, but they were high enough in difficult weather conditions during the vegetation period.

The dynamics of the growth of alfalfa leaf-stem seed mass under the conditions of mowing routines the grass stands during the second year of vegetation largely depended on the level of fertilization and biological characteristics of the studied varieties regardless of the fertilizer system. It was established that the largest crop of leaf-stem mass was formed in the Rosana variety 49,38 t/ha, and the least in Bride of the North 36,00 t/ha for phosphoric-potassium mineral nutrition and mowing of all mowings in the phase of beginning flowering.

The application of the routines of sward mowing during the growth and development phases of alfalfa and their various modifications during the vegetation period provided the maximum yield of leaf-stem mass at

45,11 t/ha for harvesting the first mowing in the phase of full flowering, 2 – on the beginning of flowering and 3 – in the budding and on 7,8 % was lower (44,74 t/ha) when harvesting all mowing in the budding phase.