THE INFLUENCE OF FERTILIZATION AND DISTANCE BETWEEN ROWS ON SEED PRODUCTION OF SAINFOIN (*Onobrychis viciifolia* Scop.), IN THE FIRST YEAR OF VEGETATION

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Abstract

The research conducted during the period of March to October 2019, at the Meadows Research and Development Station, Vaslui (46°40'-36°10' north latitude and 27°44'-20°40' east longitude) followed the influence of fertilization and the distance between rows on the seeds production (kg·ha^{-1}), seeds 1000 grains mass (g) and seeds germination (%), at sainfoin (*Onobrychis viciifolia* Scop.) seeds culture, in the first year of vegetation. The organized experience was bifactorial, 3x5 type, placed according to the method of subdivided plots, with the plot harvestable area of 13.5 m^2 (1.5 m x 9 m), in three replications, and the factors studied were: A - the distance between rows with three graduations (a_1 - 25 cm, a_2 - 37.5 cm and a_3 - 50 cm) and B - fertilization with five graduations (b_1 - unfertilized, b_2 - $N_{50}P_{50}$, b_3 - $N_{50}P_{50}K_{50}$, b_4 - $N_{100}P_{100}K_{100}$ and b_5 - cow manure 20 Mg·ha^{-1}). Following the study, it was found that by applying mineral or organic fertilizers higher quantities of seeds were obtained, with higher values of 1000 grains mass and germination and by sowing at longer distances between rows smaller quantities of seeds were obtained with higher values of 1000 grains mass and germination.

Key words: seeds production, seeds 1000 grains mass, seeds germination