SOWING DENSITY AND FERTILIZATION INFLUENCE ON FABA BEAN SEED PRODUCTION (Vicia faba L. var. major. Harz) UNDER ECOLOGICAL CONDITION FROM BUCOVINA OBCINES

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Abstract

In the researches conducted in the period 2012-2014, it noticed the influence of sowing density and fertilization influence on grain production of faba bean seed (*Vicia faba* L. *var. major*. Harz) under the mountain area conditions of the county Suceava. The researches were conducted at the Agricultural Research Center of Pojorâta (which it focused foothill and mountain areas of Bucovina Obcine), on lytic alluvial soil pH (water) 5.1, 2.9 humus content, phosphorus (P_{AL}) 45 ppm potassium (K_{AL}) 80.5 ppm, the degree of base saturation (V) 57.1 and nitrogen index (IN) 2.18. It followed in a bifactorial experience of type 2 x 7, the influence of sowing density with two graduations (20 grains germinable/m² and 40 bg/m²) and fertilization with seven graduations (unfertilized, 40N, 60P₂O₅, 40N60P₂O₅, 40N60P₂O₅, 40N60P₂O₅, 40V/ha manure 40t/ha manure + 40P₂O₅). Analyzing the average for the three research years it showed that at the faba bean from major variety, the most effective sowing density is 40 g.s. /m², when it could achieve, productions up to 4000 kg/ha, that combined administration of fertilizers with nitrogen and phosphorus achieved yield increases distinct significantly and through applying of manure at a dose of 40 t/ha and at the density of 40 g.s. / m² it could be achieved yield increases, very substantial.

Key words: *Vicia faba*, var. *major*, cold and wet areas, density, fertilization