

RESEARCHES REGARDING THE INFLUENCE OF SOME TECHNOLOGICAL ELEMENTS ON THE YIELD LEVELS OF SOYBEAN CROP IN THE CENTRAL OF MOLDAVIA PEDOCLIMATIC CONDITIONS

PAPER TITLE

Simona-Florina POCHIȘCANU¹, Alexandra-Andreea BUBURUZ¹, Lorena Diana POPA¹, Paula Lucelia URSACHE¹, Alexandra LEONTE¹

e-mail: simonapochi@yahoo.com

Abstract

The laborious researches concerning the soybean technology were developed at ICCPT Fundulea and ARDS Turda, but also at other agricultural research stations in the country, but they were few in the pedoclimatic area of Central Moldavia. Thus, under the A.R.D.S. Secuieni pedoclimatic conditions were performed researches at soybean crop in order to establish the optimum sowing epoch (three sowing epochs: early sowing - 04/09/2015, sowing in the optimum epoch - 20/04/2015 and sowing in the late epoch - 04/30/2015), the optimal seeding density (six sowing densities: 30 g.b./sqm, 40 g.b./sqm, 50 g.b./sqm, 60 g.b./sqm, 70 g.b./sqm and 80 g.b./sqm) and the best distance between rows (four distances: 12.5 cm, 25 cm, 37.5 cm and 50 cm). The biological materials used in these experiments were the Eugen and Onyx varieties, created at A.R.D.S. Turda. The results obtained in 2015 agricultural year, which is several droughty characterized, showed that sowing soybean in late epoch was the best option, the yields obtained in these variants reach 2653 kg/ha at the Eugen variety and 3244 kg/ha at the Onix variety. Regarding the sowing density, the 30 g.b./sqm and the 80 g.b./sqm sown variant were remarked as being the best. The yields obtained in this variants were at Eugen variety of 2994 kg/ha when the variety was sown with 30 g.b./sqm and of 3142 kg/ha when this variety was sown with 80 g.b./sqm. The Onix variety has obtained the maximum yield in the variant sown with 30 g.b./sqm of 3041 kg/ha, and in the variant sown with 80 g.b./sqm, the yield was slightly smaller but big enough of 2937 kg/ha. Given the price of soybean seed, the most convenient variant from the economic point of view is the one sown with 30 g.b./sqm, both at Eugen and Onix variety. The distance between rows also had an influence on the soybean yield. Of the four experimented distances tested, it was proven to be superior to all others, the one with 50 cm between rows. In this variant, the yields obtained amounted to 2530 kg/ha at Eugen variety and 2715 kg/ha Onix variety.

Key words: distance between rows, ensured density, sowing epoch, soybean, varieties
