SUNFLOWER YIELD AT DIFFERENT NITROGEN RATES AND FERTILIZER PRODUCTS

Florin Mădălin JENARU[1], Viorel ION[1]

e-mail: jenaruflorin@yahoo.ro

Abstract

Current climatic conditions, increasing concern of the entire society regarding the environmental protection, as well as regarding the access to save and safety food, to which it is added the increasingly cost of nitrogen fertilizers require farmers to optimize nitrogen fertilization according to the specific growing conditions of their crops. Choosing the right fertilizer product, rate and time of application are essential decisions for farmers. In this context, the purpose of this paper is to present the results obtained regarding sunflower yield under different nitrogen fertilization conditions as rate and fertilizer product under the specific growing conditions of South-Est Romania. In this sense, field experiments were performed in South-East Romania, respectively in Dobrogea region, under rainfed conditions in the years 2022 and 2023. The experimental factors were the following: Factor A – Nitrogen rate, with 3 gradations, respectively 60 kg/ha, 80 kg/ha, 100 kg/ha; Factor B – Nitrogen fertilizer, with 4 gradations, namely Classic Urea, Airtek Urea, Ammonium Sulphate, Sulfammo 25 MPPA DUO. The obtained results obtained under water deficit conditions drew attention to the positive effects of Classical Urea on the sunflower grain yield. It resulted that the best fertilizer option is the nitrogen rate of 60 kg/ha incorporated at seedbed preparation.

Key words: sunflower, nitrogen, fertilizer, rate, yield