SUNFLOWER HYBRIDS IN THE CLIMATIC CONDITIONS OF THE YEAR 2020 IN CONSTANTA COUNTY - SOUTH EAST OF DOBROGEA, ROMANIA

Dumitru MANOLE¹, Laurentiu Luca GANEA²

Abstract. The experimental field was placed in Amzacea, Constanta County at S.C. SPORT AGRA S.R.L., Center of Development, on the highway 38, 20 km. far from Bulgarian border. Constanta County had the largest weight regarding the surface cultivated in Romania with sunflower crop between 10-12%. The most drought area in Romania is Dobrogea (average 1961-1990: 464 mm. rainfall). Climatic change in recent years has accentuated this tendency. The number of hybrids taken into account in our experiment were twenty. Genesis has been planted in two periods of the time. When the planting was delayed the yield was decreased 303 kg/ha. The aim of this study was i) the behaviour of the hybrids in the unbeliveble dry conditions, ii) to see the yield and the behaviour of sunflower hybrids to the attack of main pathogens - Sclerotinia sclerotiorum, Phomposis helianthi, Orobanche cumana, iii) how the planting date influence de yield, iiii) the importance of the pesticides used.

Keywords: sunflower, technological improvement, pest behaviour, yield, drought

1. Introduction

Constanta County (Dobrogea area), had the largest weight regarding the surface cultivated in Romania with sunflower crop (11.10%) from arable land in 2020, and 20.63% from Constanta area arable land (General Direction of Agriculture and Development, Constanta, 2020) [4].

Nowadays there is a wide offer for sunflower hybrids which means without a screening of them is hard to decide which are the most suitable for every region. It should exist experimental fields not only for sunflower but for other important crops related to a specific region. The hybrids must be from different seed companies eliminating any suspicions. In Dobrogea such experiments were made over the years (Jinga et al., 2016; Manole et al., 2018a, 2018b, 2019) [5, 7, 8, 9] which provided results for yield in very dry conditions, behavior to the attack of the main pathogens and quality indices. Here is the first paragraph. The line spacing options are: single, 0 before the paragraph and 6 points after.

¹Ph.D., Eng. General Manager, SC Sport Agra SRL Amzacea, Constanta County, Romania, Associate Member of the Academy of the Romanian Scientists (e-mail: dumitrumanole38@yahoo.ro)..

²Agronomist Technician, SC Sport Agra SRL Amzacea, Constanta County Romania, (e-mail: ganealaurentiuluca@gmail.com).