

ABSTRACT

EFFECTS OF DIFFERENT SOWING TIMES AND VARIETIES OF GERMAN CHAMOMILLA (*Matricaria recutita* L.) ON AGRONOMIC-TECHNOLOGICAL CHARACTERISTICS

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In this study, it was aimed to determine the effects of different sowing time and different varieties of German chamomilla (*Matricaria recutita* L.) on agronomic and technological characteristics in experimental fields of Research and Practice Farm of Department of Field Crops, Faculty of Agriculture in Adnan Menderes University in 2014. Two different tetraploid *Matricaria recutita* L. (Bodegold and Zloty Lan) genotypes were used for this study. Zloty Lan was provided from Germany and Bodegold was provided from Atatürk Central Horticultural Research Institute. Trial was conducted according to split plot experimental design with 4 repeatedly. Trial factors consist 5 planting time as main plots (1 October, 15 October, 1 November, 15 November, 1 December) and 2 genotype as sub plots (Bodegold and Zloty Lan). There effect of sowing times and genotypes was found statistically significant on fresh flower yield. The highest flowers yield was found 61.61 kg/da. The mean values obtained in this study; mean plant height 45.43-55.20 cm, diameter of the mean flower 25.24-27.53 mm, mean of biomass 130-332.3 kg/da, mean of fresh flower yield 19.74-61.61 kg/da, mean drug herb 35.5-73.5 kg/da mean drug flower 7.4-13.3 kg/da, mean of essential oil ratio %0.025-0.083 and mean of essential oil yield 0.020-0.090 L/da, respectively. The main component of essential oil has been identified as bisabolol oxide a and bisabolene oxide.

Key Words: *Matricaria recutita* L, sowing date, variety, bodegold, Zloty Lan, essential oils, agronomic, yield.