

CHARACTERISTICS OF VARIETIES AND POPULATIONS BIRDSFOOT TREFOIL FOR SEED YIELD UNDER THE SOIL AND WEATHER GROWING CONDITIONS OF THE TROYAN REGION

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Abstract: During the period 2008–2010 in the experimental field of RIMSATroyan on light gray pseudo podzolic soil were tested in the following varieties and populations birdsfoot trefoil; Shumen, Nesebar, Kiten, Tryavna, Sadovo, as well as genotypes of the varieties: V. Podolyanskii (Russia), Dedinovskii (Russia), Martanskii (Russia), Zora (Serbia), Bokor (Serbia), Smolenskii (Russia). The results from seed yield showed wide ranges of variation for the different years and on mean for the period: The tested varieties and populations were with high productive potential for these seeds yield. The differences in Number of pods/raceme, Number of racemes / plant, Number of seeds / pod, 1000–seed weight and conditioned also different values of formed seed yield of the tested varieties and populations. The seed yield average for the period of study in all tested cultivars and populations were superior to the standard variety Targovishte 1. The highest seed yield was obtained from the Dedinovskii variety–0.260 t/ha, followed by Zora and Bokor–0.255 t/ha for a three year period. The higher seed yield of the tested birdsfoot trefoil varieties compared with the standard is due to the formation of the larger Number of pods/raceme, Number of racemes/plant, Number of seeds/ pod and 1000–seed weight. The correlation between seed yield and 1000–seed weight was very strong correlation ($r=0.861786$).

Key words: *birdsfoot trefoil*, varieties, populations, seed yield, structural elements, correlation associations

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