EVALUATION FOR AGRONOMIC, MORPHOLOGIC AND PHENOLOGIC CHARACTERS OF MUNG BEAN [Vigna radiata (L.) Wilczek] GENOTYPES IN THE LOWLAND OF THE WEST MEDITERRANEAN REGION OF TURKEY

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ABSTRACT

Mung bean [Vigna radiata (L.) Wilczek] is one of the most important edible grain legumes in the genus Vigna Savi. The aim of the study was to select for the most suitable mung bean genotypes in the lowlands of the west Mediterranean region of Turkey and also, to evaluate them for agronomic, morphologic and phenologic characters. A total of nineteen genotypes (seventeen from Nuclear Institute for Agriculture and Biology, one check from market of Faisalabad, Pakistan, and one check from Gazipaşa, Antalya, Turkey) were used. According to two years results, it was concluded that ML-267, ML-613, BASANTI, NIMB-101, NM-51 and NC-95 could be released for agricultural production. ML-613, PUSA 9072 and BARI Mung-2 for high biological yield; KPS-1, VC 6173 B-6 and CN-95 for large-seeded; Faisalabad, VC 6372 (45-8-1), NM-54, NM-92 for earliness; BARI Mung-2, Gazipaşa, KPS-2 and PUSA-9072 for taller plant height; BARI Mung-2, Gazipaşa, and ML-613 for increasing photosynthetic capacity; CD-3, BASANTI, Faisalabad, NM-54 for more flower number per plant; VC 6173 B-6, KPS-1 and NIMB-101 for pod length; CD-3, NM-51, ML-267 and Faisalabad for more seed per pod; and ML-613, VC 6372 (45-8-1) and CD-3 with more pod per plat were selected. The results indicated that there was abundant variability especially in agronomic characters. Accordingly, adapted mung bean genotypes could successfully be selected for the region.