SELECTION FOR RESISTANCE TO ASCOCHYTA BLIGHT (Ascochyta fabae Speg. f.sp. fabae Gossen et al.) IN FABA BEAN (Vicia faba L.) POPULATIONS AND ASSESSMENT OF COLD TOLERANCE AND YIELD CRITERIA

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ABSTRACT

Five populations and three checks of faba bean (*Vicia faba* L.) were grown to select lines for resistance to ascochyta blight (*Ascochyta fabae* Speg. f.sp. *fabae* Gossen et al.) of faba bean at the lowland (approximately 30° E, 36° N, 51 m from sea level in Antalya) and to evaluate for cold tolerance at the highland (30° E, 37° N and 850 m from sea level in Urkutlu, Bucak, Burdur) of the West-Mediterranean region of Turkey. Also, plant height, number of stem per plant, seed yield, biological yield, harvest index, 100-seed weight, days to flowering and maturity in all the genotypes were assessed. While native faba bean population was detected as intermediate to cold, the remaining genotypes generally stood in minus 11 °C in seedling stage in the highland. Out of 43 lines selected, 30 promising lines were resistant to ascochyta blight and high yielding. These lines will be used directly or indirectly in further breeding programs.

Key words: Faba bean, Vicia faba, ascochyta blight, Ascochyta fabae, cold tolerance, yield criteria