

AB085: Variation of faba bean genotypes to different *Orobanche crenata* biotypes in Egypt

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Faba bean (*Vicia faba* L.) is an important grain legume in East Asia and North Africa. faba bean productivity is severely affected by broomrapes. Resistant varieties to *Orobanche* have different responses to different *Orobanche* biotypes. The aim of this study was to evaluate the reactions of



different faba bean genotypes to five *Orobanche* populations collected from Sakha, Giza, Malawi, Sids and Shandaweel during 2012/13 and 2013/2014 seasons in Egypt. Two partial resistant varieties (Misr-3 and Giza-843) and one susceptible (Giza-3) were planted in infested soils with different *Orobanche* populations in randomized block design in early November for cropping 2012/2013 and in split plot design with two date of planting in first week of November and first week of December in 2013/2014 with two different treatments by glyphosate. Genetic relationships the five *Orobanche* population was estimated by Jaccard genetic distance using five ISSR markers. The results indicated significant differences among genotypes for their reactions to the different *Orobanche* populations and date of planting. The variety Misr3 showed high degree of resistance to all populations than Giza-843. The genetic distance of the *Orobanche* populations showed significant differences within populations but not among populations.