

Varietal Behavior of Some Chickpea Genotypes to Wilt Disease Induced by *Fusarium oxysporum f.sp. ciceris*

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Abstract : The behavior study of forty-two varieties and genotypes of chickpeas regarding root wilt disease induced by *Fusarium oxysporum* under the natural conditions of infection was conducted at the ITGC experimental station in Sétif. The infected plants of the different chickpea genotypes have shown multiple symptoms in the field caused by the local strain of *Fusarium oxysporum f.sp.cecris* belonging to race II of the pathogen. These symptoms ranged from lateral or partial wilting of some ramifications to total desiccation of the plant, sometimes combined with the very slow growth of symptomatic plants. The results of the search for sources of resistance to *Fusarium* wilt of chickpeas in the 42 genotypes tested revealed that in terms of infection rate, the presence of 7 groups and no genotype showed absolute resistance. While in terms of severity, the results revealed the presence of three homogeneous groups. The first group formed by the most resistant genotypes, in this case, Flip10-368C; Flip11-77C; Flip11-186C; Flip11-124C; Flip11-142C, Flip11-152C; Flip11-69C; Ghab 05; Flip11-159C; Flip11-90C; Flip10-357C and Flip11-37C while the second group is the FLIP genotype 10-382C which was found to be the most sensitive for the natural infection test. Thus, the genotypes of *Cicer arietinum L.*, which have shown significant levels of resistance to *Fusarium* wilt, can be integrated into breeding and improvement programs.

Keywords : chickpea, *Cicer arietinum*, *Fusarium oxysporum*, genotype resistance

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