



Response of Tomato Varieties to the Early Blight Disease Caused by *Alternaria solani*

Amani Hussein Hameed Alabbas and Labeed A. AL-Saad*

Department of Plant Protection, College of Agriculture, University of Basra, Iraq

**E-mail: labeed.najim@uobasrah.edu.iq*

Abstract: Tomato early blight disease is one of the important, common, and ubiquitous spreading disease that caused by *Alternaria solani*. This study involved examination of commonly cultivated tomato varieties in Basra (Yasmin, Mubakir and Sultana) to determine the extent of their response to infection by *A. solani*. Several parameters were considered to determine the response level of each tomato variety to the pathogenic fungus, which included the infection percentage, fruit damage percentage, the length, the wet and dry weight of shoot and root. The varieties (did not differ significantly among each other in the infection percentage (14.35- 24.39%). Furthermore, growth indicators represented non-significant differences between infected and healthy plants, while the dry weight rates of the root system of the infected plants was significantly less than control. Yasmin, Mubakir and Sultana varieties can be considered as a resistant or moderate resistant variety.

Keywords: *Lycopersicon esculentum* Mill., *Alternaria solani*, Biochemical Response, Quantitative resistance, Early blight
