

STUDY ON RESISTANCE LEVELS OF TWO COMERCIAL GRAFTED GRAPEVINE CULTIVARS (*Vitis vinifera* L.) ON RESISTANT ROOTSTOCKS TO CROWN GALL*

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Abstract

Grafted and rooted cuttings of grapevines were inoculated with six pathogenic strains of *Rhizobium vitis*. Evaluation of infection severity was done based on the number, size and weight of galls on vines, four months after inoculation and in experiment duration of six years. Results showed that vinifera varieties were very sensitive to crown gall. Weight, number and size of galls induced on grafted vines on H4 and H6 was less than those on other vines. Scions grafted on rootstocks H4 and H6 had a 21.5% and 6.8% incidence compared to 55% for self-rooted vines. During six years 90% of self-rooted vines died, while 18% and 5% of the grafted vines on H4 and H6 hybrids were dead, respectively. The highest yield was found in the Red Sahebi grafted vines on H6 rootstock (2.98 kg/ vine) and the lowest was in self-rooted vines (1.25 kg/vine) and on others (2.25 kg/ vine), respectively.

Keywords: Grapevine, Rootstock, Resistance, Pathogenicity, *Rhizobium*, *Agrobacterium*.

See Persian text for figures and tables (Pages ۱۱۹-۱۲۲).

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