ABSTRACT

THE DETERMINATION OF FROST RESISTANCE CHARACTERISTICS OF SOME TABLE GRAPE CULTIVARS

Ercan AKTAN

M.Sc. Thesis, Departmant of Horticulture

Supervisor: Assist. Prof. Dr. Mustafa ÇELİK

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This research was carried out to determine of resistance to winter and late spring frosts of Alphonse Lavallèe and Superior Seedless cvs. of *Vitis Vinifera* L. Cuttings in full dormant period were taken on March, 2011. Artificial frost tests were made at-15 ve -18 ºC for 12, 18 ve 24 hours. As a result of the examinations, it was seen that all winter buds died. It was found that both cultivars are sensitive to cold conditions. In addition that, the determine of late spring frost resistance of Alphonse Lavallèe and Superior seedless cvs. was aimed in 2012 year. Firstly, one bud cuttings at 3 th phenological stage were exposed at -10 ºC for 1, 2, 3, 4, 5, 6, 7, and 12 hours and it was seen that all buds died. Secondly, the cuttings were exposed at -2 and -5 ºC for 1, 3 and 5 hours. Survival of buds and vegetative development parameters were recorded. Sum of the percent of primary and secondary bud survival ranged between 72,60% and 99% for Superior seedless; and 83,60 % and 99% for Alphonse Lavallèe. It was not found a correlation between % total sugar and total bud survival. As are result of that, the regions that temperatures dropped -10 ºC in Spring season are not proper to grow these cultivars. However, at -2 and -5 ºC in Spring session, it is estimated that the cultivars at third phenological stage will not be affected by late spring frosts.

Key words: Alphonse Lavallèe , Superior Seedless, frost resistance, winter bud, artificial frost test.