Effect of thiamethoxam insecticide on vine cicada, *Psalmocharias alhageos* (Hom.: Cicadidae)

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Vine cicada, *Psalmocharias alhageos* (Hom.: Cicadidae), is one of the most important pests of vine trees in Iran. Main damage of *P. alhageos* is caused by long feeding of nymphs on the vine roots and laying eggs of females under the bark of the shoots. In the present study the effect of thiamethoxam and (Actara⁴) and diazinon (10% granule) were tested by soil application in Qom and Markazi regions, in 2008-2009 years. The results showed that, thiamethoxam (20 ml) can increase grape vine yield by 40 and 45% compared with diazinon and control, respectively. Consequently usage of thiamethoxam (20 ml each vine tree) at nymphs emergence time in soil was effective in decreasing vine cicada damage and increased for grape vine yield.