

**O-17 (245)****EFFECT OF FOLIAR APPLICATION OF IRON ON SEASONAL CHANGES OF SOME PHYSICAL AND CHEMICAL PROPERTIES IN BERRIES OF HALWANI LEBANON GRAPE CULTIVARS (*Vitis vinifera* L.)**

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A Field experiment was conducted in 2009 and 2010 growing seasons, to study the effect of foliar application of iron- chelated "Fe-EDTA" at 0,100 and 200 mg. l<sup>-1</sup> concentrations on the seasonal dynamic of some physical and chemical properties in berries of Halwani Lebanon grape cultivar, grown on a calcareous soil in Mosul region- Iraq. The results revealed that the foliar application of 100 mg Fe.l<sup>-1</sup> caused a significant increase of berry weight, TSS, Glucose and Malic acid in berries. While spraying with 200mg Fe.l<sup>-1</sup> caused a significant increase in the TA, Tartaric acid and Fructose in juice berries compared with the control for both seasons. Additionally, berry weight, TSS, Glucose and Fructose were increase towards from the beginning of berry growth to veraison and ripening stage in both seasons. While the TA, Malic acid and Tartaric acid were increased towards from berry set to veraison. Whereas, decrease towards in the end of the growth seasons in both seasons. On the hand, the interaction between iron levels and times were discussed too.