



Effects of Application Commercial Product Rates and Times on Yield and Fruit Quality of CV. Medjool Date Palms

Esam, A. M. M, N. E. Ashour, Omaima, M. Hafez*, Malaka, A. Saleh

Pomology Research Department, National Research Centre, Dokki, P.O. Box 12622, Cairo, Egypt

Abstract: Inflorescences of Medjool date palms were treated with a commercial product namely (Sword[®]) contains (25% K₂O, 0.5% Mg, 0.5% Zn, 25% Salicylic acid, 0.01% L-ascorbic acid, 0.01% Riboflavin and 48.98% helper's carrier materials) as foliar application. Dates were sprayed with Sword[®] at (1 and 2%) one, two and three times/rate. Once at full bloom, twice at full bloom and one month later and triple at full bloom, one month later and month before harvest time, in addition to the untreated one (control).

In general, results showed that foliar application of Sword[®] had appositve effect on performance of Medjool date palms and obviously there is a direct relation between rises the most parameter contents with increasing rates and times of Sword[®]. The best results obtained with spraying 2% Sword[®] three times is the promising treatment for increasing fruit set, fruit retention, maximize the bunch weight and yield/palm and improving fruit physical characteristics (such as fruit weight, length and diameter) as well as chemical characteristics of date fruits by increasing TSS, total sugars and reducing acidity. Besides, it considered environmentally safe and low cost.

Key words: Medjool date palm, application, nutrients, antioxidants, fruit set, yield and fruit quality.