



Thinning populations of the Florida Wax Scale in citrus by use of potassium nitrate and surfactant

The purpose of the study was to test the control of Florida Wax Scale (FWS) in citrus by potassium nitrate in comparison with broad-spectrum insecticides.

The trial included the following treatments: organophosphate (13L in 3500L water/ha), KNO_3 (4%) + surfactant (Triton B-1956) 0,05% sprayed in 3500 L/ha and the control. These treatments were carried out on a 34 ha, 20 years old, citrus grove in the southern coastal plain of Israel.

Control of FWS by potassium nitrate + surfactant was nearly as good as organophosphate pesticides and statistically significantly better than the untreated control (Figure 1).

In addition, in a citrus grove at Yesodot (southern coastal plain) in Israel, thinning the invading generation of FWS larvae at low population densities by a combination of a nutritional spray of 4% potassium nitrate with 2% spray oil, once a year, obviated the necessity to control the pest by any other means during 7 years.

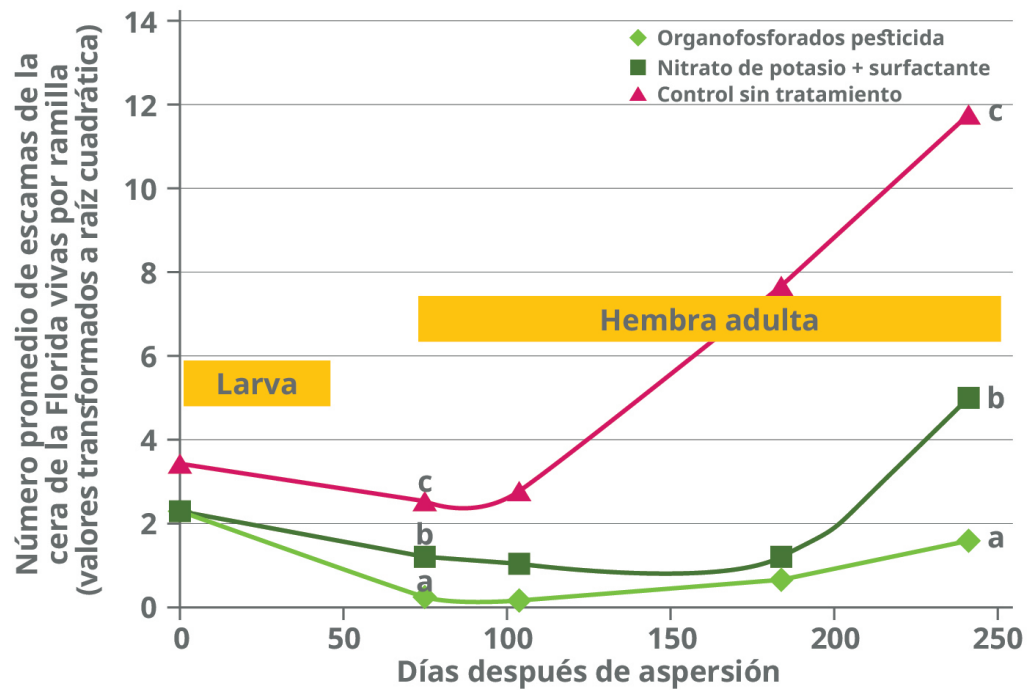
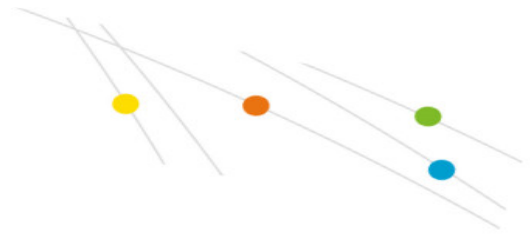


Figure 1. Effect of treatments on the mean number of live Florida Wax Scale per twig (square root transformed values) in days after spraying.