

SUMMARY

Winter production of Persian lime (*Citrus latifolia* Tanaka) under rainfed conditions

In Veracruz, the main Persian lime production occurs in the spring-summer season, as a result fruit prices and economic incomes for farmers are low. However, in the winter season, fruit supply decreases and prices improved considerably. In this regard, producing in this season represents an opportunity for the farmer. Therefore, in order to produce fruit in the winter season we looked out for the best combination of fertilization and management for the production of fruits of Persian lime (*Citrus latifolia* Tanaka). In the months of February to April, different intensities of pruning, foliar and soil fertilization with urea were used. The experiment was done under rainfed conditions in the central region of the state of Veracruz, in the municipality of Cuitlahuac, during the period from July 2014 to April 2015, using seven years old trees, grafted on volkameriano rootstock (*Citrus volkameriana* O.). A total of 17 treatments resulted on combining three pruning intensities of 0, 3, 6 and 9 knots of branches and terminal buds in two different execution dates: on July 15 and on August 15; urea fertilization to the soil on August 15 and on September 15 and no urea application; and foliar urea application on October first and on November first. The variables evaluated were: number of vegetative buds, flowers number, number of tied fruits and total yield. A random blocks design with three replications was used. The treatment 10 (no pruning, soil fertilization with urea on September 15 and foliar urea application on November first) was the best one. It showed significant differences compared to the other treatments and control. It presented anthesis on November 07, as well as higher fruits tied. This allowed production during the months of February and April to market on high season. This treatment, also showed the higher yield and a ratio cost/benefit of 1.14; allowing an acceptable income, which will contribute to the economy of the farmers, and the profitability of Persian lime cultivation.

Key words: pruning, Persian lime, vegetative buds, rainfed production, flowering