## LONG TERM PERFORMANCE OF FUERTE AND HASS A-153 CVS. ON LULA AND TOPA-TOPA ROOTSTOCKS ON SHALE SOILS

J.M. Hermoso<sup>1</sup>, J.T. Soria<sup>1</sup>, J.C. López<sup>2</sup> y J.M. Farré<sup>2</sup>.

<sup>1</sup> Estación Experimental La Mayora. Algarrobo-Costa. 29750 Málaga. España.

<sup>2</sup> Centro de Investigación y Formación Agraria. Cortijo de la Cruz s/n. Churriana. 29140 Málaga. España. E-mail: <u>tropicalesfasip@terra.es</u>

The study was done between 1981 and 2000 in a slightly calcareous and well drained shale soil. For the first eight years (six crops) Fuerte/Topa had higher yield and tree efficiency (yield per unit trunk cross sectional area) than Fuerte/Lula. The reverse happened with Hass. None of the differences were statistically significant. In the last twelve crops (1988-2000) differences between root-stocks were smaller. Fuerte/Lula produced trees larger than Fuerte/Topa. There were no consistent differences in pulp dry matter content between rootstocks but in most years Lula induced slightly earlier ripening.

In both cultivars K leaf levels were higher and Ca-Mg lower on Topa-Topa. Hass had higher P and Mn leaf levels than Fuerte on both rootstocks. N, Cu and Fe were similar in both cultivars and rootstocks. In the last 4 years of the experiment B was applied with the irrigation water. Leaf content increases were bigger in Fuerte and similar in both rootstocks.