

EVALUATION TO SALINITY STRESS IN WEST INDIAN AVOCADO ROOTSTOCKS PREVIOUSLY SELECTED AS ROT ROOT TOLERANT-RESISTANT

N. A. Rodríguez¹; L. Gallo¹, and A. Marrero²

1 Dpto. de Protección Vegetal. Instituto Canario de Investigaciones Agrarias (ICIA). Apto 60. 38200 La Laguna, Tenerife, Islas Canarias, España. Correo Electrónico: lgallo@icia.es

2 Dpto. Ingeniería, Producción y Economía Agraria. Escuela Técnica Superior de Ingeniería Agraria Universidad de la Laguna. 38207 La Laguna, Tenerife, Islas Canarias, España.

The West Indian avocado race shows the best adaptation to salinity stress. The 'Maoz' rootstock, from Israel, shows resistance to salinity stress and chlorosis.

In a first trial, the status and behaviour under salinity stress conditions were studied through samples and foliar analyses in the West Indian rootstocks collection from the *Instituto Canario de Investigaciones Agrarias* (ICIA)

In a second trial, two-year-old clonal West Indian rootstocks, 'Canarias 1', 'Canarias 2', 'Canarias 3' (hybrid West Indian x Guatemalan) and 'Canarias 4', selected as tolerant-resistants to *P. cinnamomi*, were studied under salinity stress along with 3 two-year-old clonal Mexican rootstocks, 'Duke 7', 'Topa-Topa' and 'Thomas'. Three irrigation treatments with sodium chloride were established (S_0 , water without sodium chloride; S_1 , water amended with $0.75 \text{ g}\cdot\text{l}^{-1}$ of sodium chloride and S_2 , water amended with $1.5 \text{ g}\cdot\text{l}^{-1}$ of sodium chloride). The trial was performed for 50 days, twice a week with 500 ml per plant.

The results showed that the West Indian rootstocks 'Canarias 1' and 'Canarias 2' are highly tolerant to salinity stress and also showed that the Mexican rootstock 'Duke 7' is the most susceptible under salinity stress conditions.