

ABSTRACT

The effects of auxins, rooting cofactors, ageing and wounding were investigated in the promotion of rooting of Mahoe and Pimento stem cuttings. Mahoe responded favourably to the use of the auxins IBA and NAA singly and in combination, and to the application of 10 ppm boric acid with 50 ppm calcium chloride. The use of combinations of auxins, although producing generally better results than controls, was not as good as some single auxin treatments. Wounding of cuttings affected rooting unfavourably. There was a slight reduction in the rooting response for mature tissues compared to juvenile tissues. Pimento showed a decline in rooting response to IBA as the plant matured. One year old cuttings rooted easily, three and a half years old cuttings rooted with difficulty and above ten years old (mature) did not root at all. All attempts to encourage rooting by the use of several auxins, cofactors and wounding failed with mature Pimento cuttings. Bioassays of crude tissue extracts from mature and juvenile Pimento tissues did not reveal significant differences even though GLC analyses did show some differences in the oil content.