

AN INVESTIGATION INTO THE EFFECT OF RINGBARKING AND IBA ON ROOTING OF ETIOLATED DUKE SEEDLINGS

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Progress Report

OPSOMMING

Beworteling van ge-ente Duke 6 volgens die Ted Frolich metode is stadig en wisselvallig. Ringelering van 50% net bokant die ent-verbinding op die ge-etioleerde Duke 6 en behandeling met 7% IBA het die bewortelingstyd verkort en die persentasie beworteling verhoog. Selfs met hierdie behandeling bly die Ted Frolich metode stadig en wisselvallig.

SUMMARY

Rooting of etiolated Duke 6 grafts with the Ted Frolich method of propagation is slow and variable. A 50% ring bark of 5 mm just above the graft on the etiolated Duke 6 material and treated with 1% IBA reduced the time for root production and increased the percentage of rooted plants. The Ted Frolich method remains a slow process of propagation of clonal rootstocks.

INTRODUCTION

Using the Ted Frolich method of rooting Duke 6, we wanted to induce a higher percentage of rooting at an earlier stage. IBA as a rooting stimulus, as well as the positive effect of ring barking are well known nursery techniques.

PROCEDURE

The following material was used:

Edranol seeds were planted 1978.07.10 and grafted with Duke 6 on 1979.02-29; etiolated from 1979.02.19 to 1979.03.06 and treated on 1979.03.06.

Treatments

- a) Ring barking of 5 mm just above the graft on etiolated Duke 6.
- b) 50% ring barking of 5 mm just above the graft on etiolated Duke 6 and treated with

1% IBA + 1% Benomyl + 98% Talc powder.

- c) Scraping of the basal part of grafted etiolated Duke 6.
- d) Scraping of the basal part of grafted etiolated Duke 6 and treated with 1% IBA as treatment No. 2.
- e) Untreated control of etiolated Duke 6

RESULTS				
Progressive percentage Rooted Etiolated Duke 6 grafts				
Date:	20/4	26/6	28/8	19/10
1. Ringbark	13	19	22,6	29,7
2. Ringbark + IBA	26,8	35,4	41,5	59,8
3. Scratch	9,8	19,7	24,7	35,8
4. Scraped + IBA	6,4	10,3	15,4	24,4
5. Untreated	10,0	17,5	21,2	30,0

DISCUSSION

The combination of ring barking plus IBA had a positive effect on root development. Ring barking alone or scraping had no effect. IBA had no effect where it was used in combination with scraping.

REFERENCE

TOERIEN, JC. 1977. Production of Avocado Trees in the Nursery. SAAGA Research Report 1: 21 - 22.