

# 'Fuchs-20' Avocado Rootstock<sup>1</sup>

A. Kadman and A. Ben-Ya'acov

Institute of Horticulture, Agricultural Research Organization,  
The Volcani Center, Bet Dagan, Israel

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## Origin

'Fuchs-20' (*Persea americana* Mill.) was selected in an experiment carried out during 1959-60 to find a highly tolerant rootstock for saline conditions from West Indian seedlings of 5 different groups and hybrids, including seedlings of 'Fuchs' (West Indian x Guatemalan). Plants were grown in containers and irrigated with highly saline water (1330 ppm NaCl). Only 4 plants survived. These survivors were planted in an orchard in order to obtain material for further experiments by vegetative propagation. 'Fuchs-20', a 'Fuchs' seedling marked No. 20, was the only one of these 4 plants from which cuttings have been successfully rooted (2).

## Description

'Fuchs-20' is a large vigorous tree to 10m height with large, dark green leaves. The fruit (Fig. 1) is ellipsoid, medium to large size (350-450g), with smooth, pale green skin covered with numerous lenticels which turn yellowish during ripening in October. The flavor is very good and the oil content is 12-13%. Yields are relatively low. Seedling plants of 'Fuchs-20' show high variability both in appearance and tolerance to salinity; whereas vegetatively propagated plants show high uniformity and tolerance to salinity.

## Rootstock performance

The trees grafted on 'Fuchs-20' rootstocks showed the highest tolerance among 6 vegetatively propagated avocado rootstocks grafted with 'Fuerte' and 'Hass' and irrigated with saline water

(350ppmCl), (1). Trees of various cultivars grafted on 'Fuchs-20' rootstocks show excellent performance without any damage due to salinity in a commercial orchard irrigated with water containing 380-400 ppmCl, (A. Ben-Ya'acov, unpublished data).

'Fuchs-20' was found free of sunblotch virus.

## Propagation

'Fuchs-20' can be propagated by root-

ing of cuttings under mist with 48 to 50% rooting in some experiments (2). Rooting rates higher than 70% have been achieved in other experiments in which cuttings were taken from topped and hedged plants (3).

## Availability

'Fuchs-20' budwood has been sent to California for testing under saline conditions. A limited amount of budwood can be obtained from the authors.

## Literature Cited

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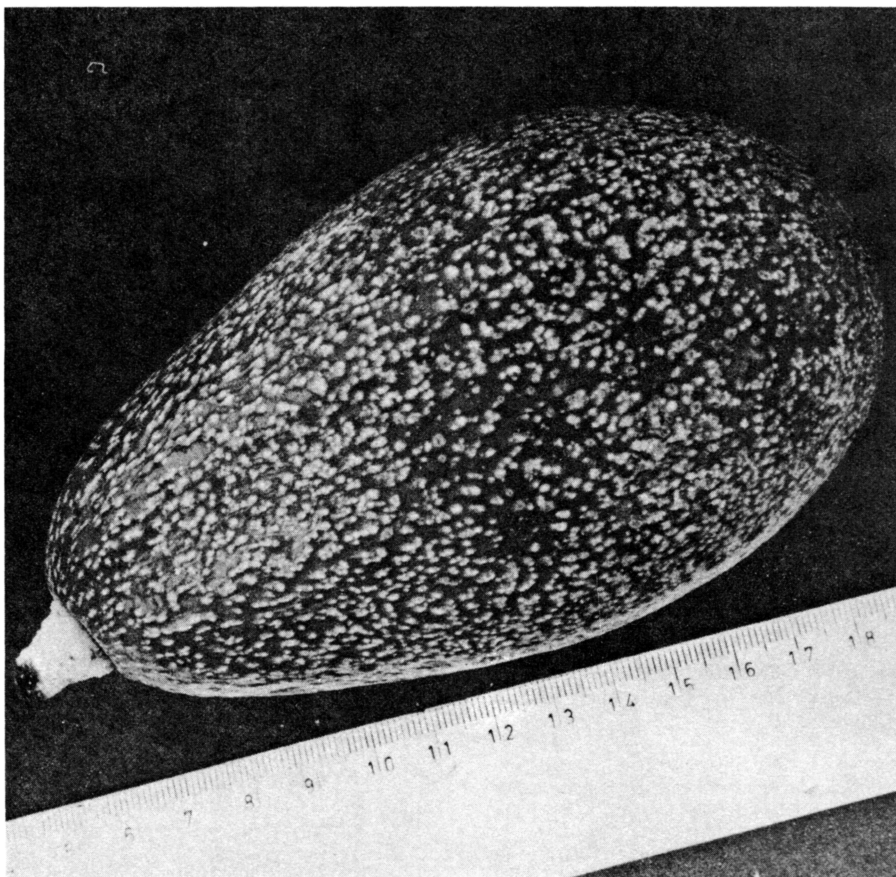


Fig. 1. Fruit of 'Fuchs-20' avocado.

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