as M 26, MM.106 and MM.111 and these might be of value where smaller trees more suitable for the garden are required.

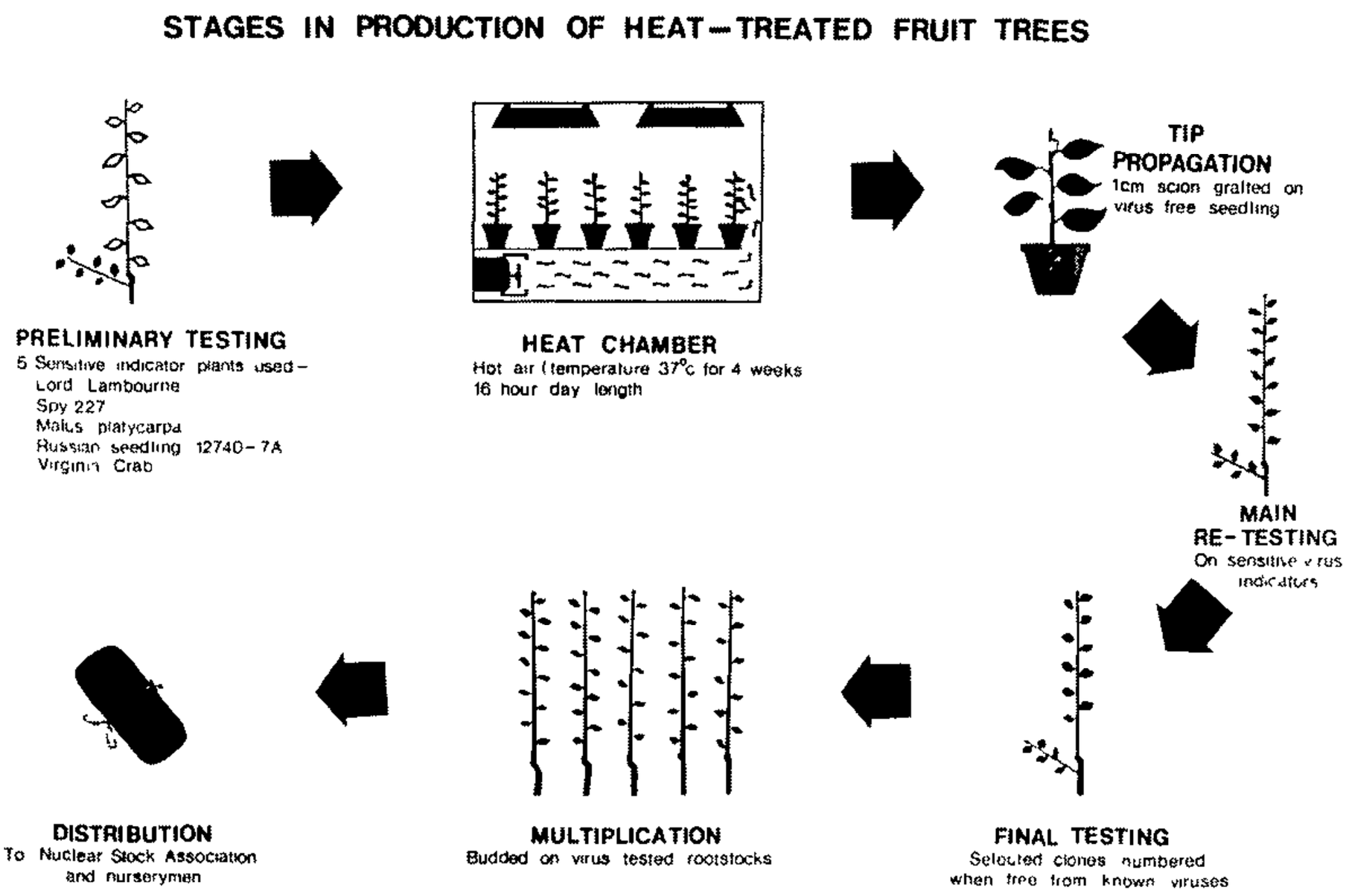

Fig. 6. Stages in the production of virus-tested fruit trees and ornamental *Malus* trees.

PROPAGATION OF CLEMATIS

TOM ALLEN

James Coles and Sons
Thurnby, Leicestershire

Gratting. The *Clematis vitalba* rootstocks are lifted and laid in thinly in the autumn. Stock plants of the scion varieties should be chosen carefully because only strong healthy plants are suitable. These are potted into 5 in. pots using John Innes 3 compost and set up in a house with temperature of 55° F. at the end of December. By the end of January they will have made about four feet of growth and grafting may commence. Rootstocks should be washed as clean as possible. A single side-graft is used; the length of the scion cut exceeds slightly that of the cut on the rootstocks, as the tongue of scion wood protruding below the tie of fine raffia assists scion rooting.

After grafting, the plants are potted as deeply as possible into 2½ in pots in John Innes seed compost, so that only the leaf and bud is left above the soil. The plants are set into a closed case with a bottom heat of 70-80° F. and watered well. After 2 or 3 weeks callus will form on the top of the stock and the bud will start to grow; the grafts can then be placed on an open bench with house temperature of 60° F. When 6 in.

high they should be staked with 18 in. splits. Six weeks later they will be ready for potting on into larger pots and growing on for sale the same year.

Cuttings. Stock plants should be prepared as for grafting, but they should be kept frost free during the winter. In the spring they will grow away very strongly and by late April or early May the wood should be ready for making the internodal cuttings. Cuttings 2 inches in length are ideal Most of the wood can be used, discarding only the soft tips.

Cuttings are then dipped in Seradix No. 1 powder and inserted eight into a 3 in pot, in a compost of two parts sand, one part peat. The cuttings are arranged around the edge of the pot and dibbed as deeply as possible; by this method the buds are kept soft and moist.

The pots of cuttings are then placed into a closed case with a bottom heat of 70-80° F Great care has to be taken at this stage because the spring sun can be very strong and shading will have to be used. The cuttings will be rooted in three or four weeks and ventilation can then gradually be given When fully aired the cuttings should be potted on. We use John Innes seed compost and 2½ in. pots; the plants can be summered in a cold house or cold frame.

The buds having been kept soft and moist will now break and grow away quickly. The plants must be kept frost free in the early part of the winter and then potted before Christmas into 4½ in. 'Long Toms' using John Innes 3 mixture, and then kept frost free for the rest of the winter. The plants will then grow on early in the spring. By letting them grow this way one can do away with stock plants and use the young plants for propagation. They will still make strong plants for sale by late summer.

BERRIED FRUIT PROPAGATION

A. R FLINT

Woodshoot Nurseries, Kings Bromley, Burton-on-Trent, Staffordshire

The main reason for choosing our particular site in the Midlands for growing soft and berried fruits was the soil. It is ideal, in our opinion, for producing a strong fibrous root system which, though important to all plants, is especially so with berried fruits. In texture it is a sandy loam overlying water-bearing gravel and is, therefore, well drained and low in mineral nutrients Regular fertilizer applications and FYM, when available, ensure that the plants remain healthy; a heavy rainstorm can wash a fertilizer application straight through but, on the other hand, during a dry period we find our irrigation system invaluable. The spring of each year seems to bring a regular