

## CROSS POLLINATION

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1985 Nov 5

Why is cross pollination such a widespread mechanism in plants? The conventional answer is that it is to preserve plant heterogeneity and flexibility to changes in conditions, 'hybrid vigour', etc.

Perhaps a more important reason is the opposite: to preserve species homogeneity rather than heterogeneity. While individual plants are normally fixed, their pollen is not. Circulation of pollen among a group of individuals will preserve their 'species purity'. If this did not happen, there would be a danger that evolution would soon separate one species into many and breeding populations could drop below some critical level.

## PORTABLE GRAFTING CHAMBERS

1985 October 17

Success in grafting/budding seems to depend strongly on temperature and humidity applied after treatment.

It should be possible to make up portable grafting chambers to be applied to field-grafted trees for the length of time needed to get bud take. These could be suitably insulated & protected, and could even have internal heat sources as required, perhaps driven by solar cells ~~and~~ or other energy-gathering device. Possibly microcomputer controlled - not too expensive as the chambers should be re-usable.

## CARBIDE BAGS FOR FRUITING

1985 Oct 10

Carbide (i.e. calcium carbide) is known to induce flowering in some plants (eg pineapples) [presumably thru acetylene evolution and change to ethylene-like substances].

They hang in plastic bags of carbide in fruit trees; atmospheric moisture and rain should release acetylene. Obviously a covered top will reduce the effect of too-heavy rain.