VIRUS ELIMINATION AND TESTING

Heat Treatment

- Spring. Bench graft scion onto seedling rootstock. Grow on strongly in Dutchlight house.
- Following spring, bring trees into heated glasshouse to bring into growth for 2 weeks.
- Put into hot-box at 25° C
- Raise by 3° C every other day to 37° C and hold for 28 32 days

NB Watch for heat sensitivity during April – May. Use Vapona strip for red spider.

Tip Grafting

- Grow seedling rootstocks in pots
- Cut down to 6 10cm and cut a small slit into top
- Excise approx. 2cm of heat treated scion tip
- Insert tip into slit in top of stem
- Seal graft with 'Stericrepe'
- Cover with plastic bag supported with small cane
- Grow under shade cover in glasshouse for 2 weeks.
- Wean out of shade and grow on in well ventilated Dutch-light

NB Grafts should put on 60 - 90 cm during the summer months.

Virus Testing

- For each variety, bud 3 mother trees with heat treated material
- Double bud 3 seedling stocks for each of the required indicators
- High worked, test bud beneath indicator bud.

<u>Indicators</u> NB Check double budded trees yearly for symptoms.

| APPLES | SYMPTOMS | TEST PERIOD |
|------------------|---|----------------|
| Malus platycarpa | Scaly bark | 2 yrs |
| Virginia Crab | Stem pitting [also possibly decline] | 2 yrs |
| Russian Seedling | Chlorotic leaf spot; leaf resetting [very | 2 yrs |
| | sensitive] | |
| Spy 272 | Epinasty [leaf curl] & decline; chlorotic leaf | 1yr [July-Aug] |
| | spot [rings] | |
| Lord Lamborne | Apple mosaic; rubbery wood | 2 yrs |
| M9 | Chat fruit | 4-5 yrs |
| PEARS | | |
| Pyronia | Sooty ring spot [SRS]; epinasty; chlorotic leaf | |
| | spot [CLS] | |
| LA62 | Pear blister canker; red mottle; vein yellows | _ |
| Jules d'Airolles | Vein yellows | _ |