

Improving tray plant production technology in Ireland

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Objectives

- Reason for doing this work
- Outline first year of work
- Some results
- Future trial work- 3 more years

Propagation-Ireland

- **Ireland-season now from April-Nov**
- **Cold stored plants are needed for 60-day & protected cropping**
- **Vast majority of plants imported**
- **Plant quality problems!!**

Propagation-Ireland

The future

- **A number of new tray plant producers**
- **And also new bare-root producers**
- **Large capital investments**

Project objectives-Yr 1

- **Establish 1st part of production protocol**
- **Nutrient requirements for 'tray plants'**
- **Effect of time (date) of harvesting runners on subsequent plant quality**
- **Runner order**
- **Growing media**

Materials and Methods

Mother plant nursery

- Project began glasshouse- January 2005
- Strawberry cultivar- Super Elite 'Elsanta' at 4 plants m²
- 25 litre peat modules with drippers
- Fertigated with standard feed EC 1.8 dSm⁻¹
- Black mypex on ground
- Straw mulch and sprinklers

















9-celled (Bato)
Osmocote 1 kg m⁻³



Electric leaf



90-100% humidity



25cm between rows
33 plants per m⁻²



**30th July: 21days
post tipping**



24th August



14th September



15th November

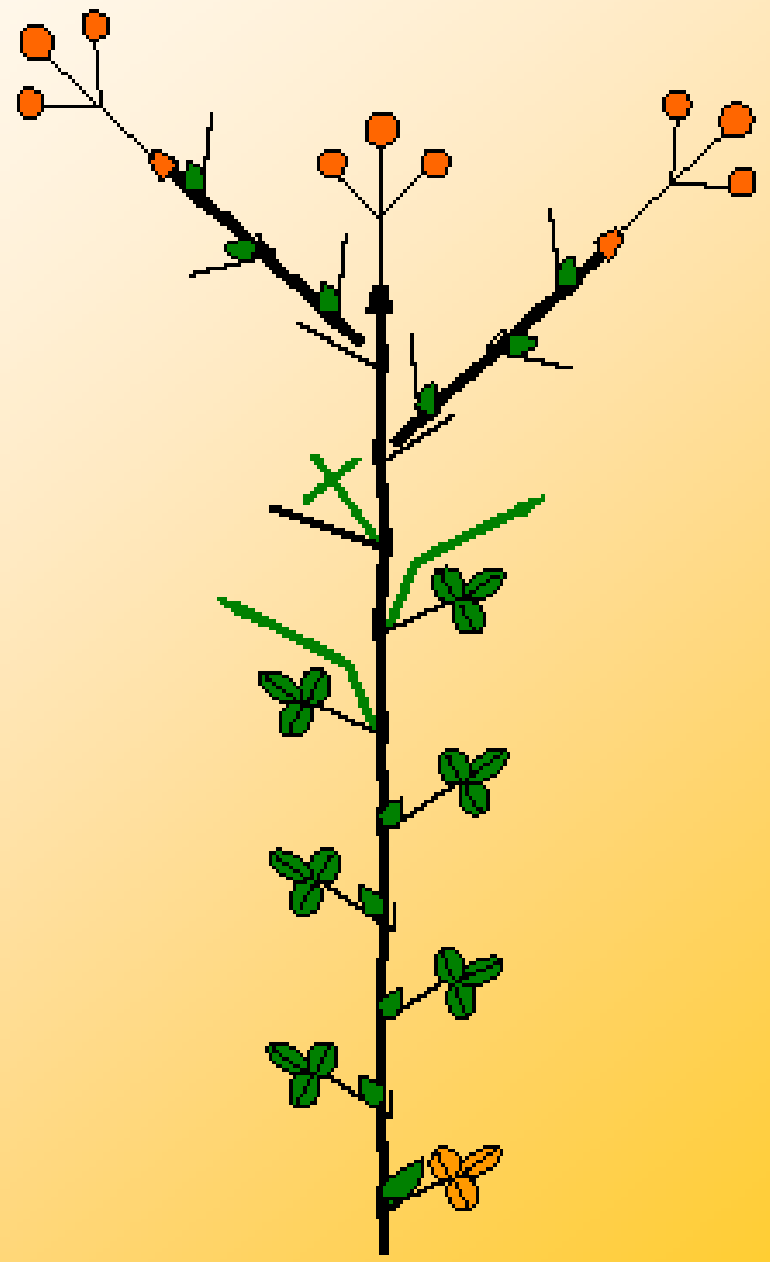
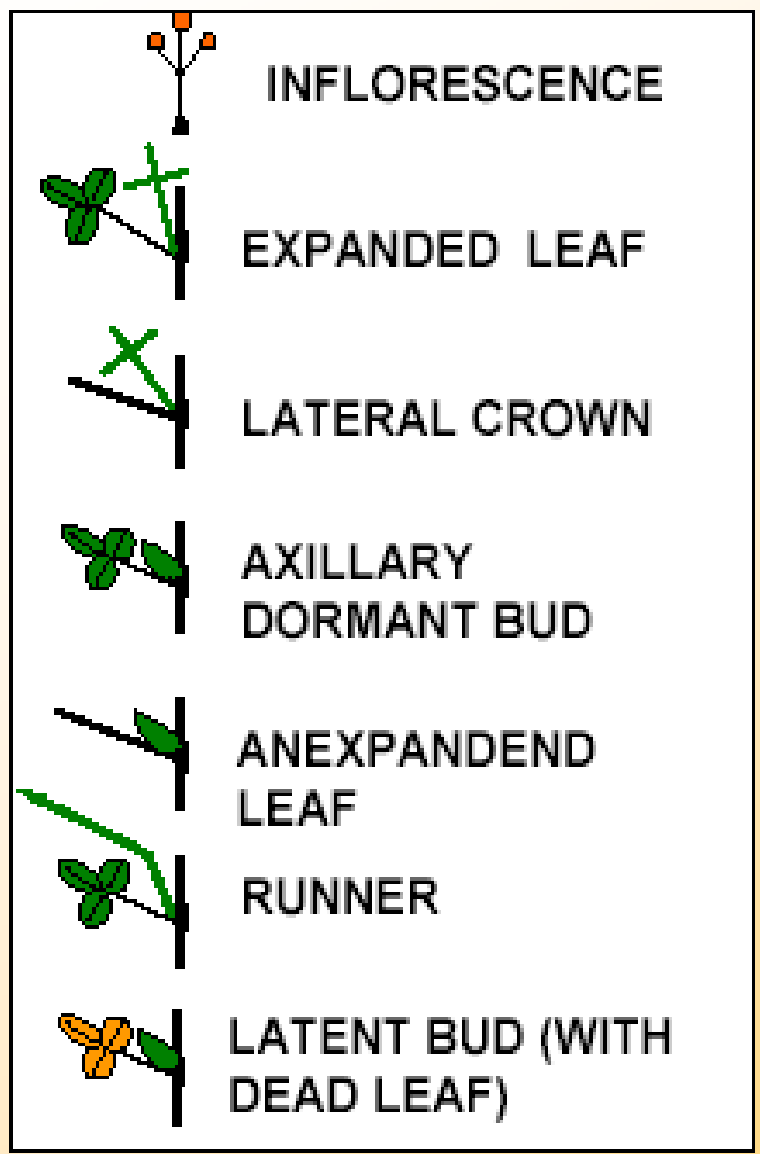




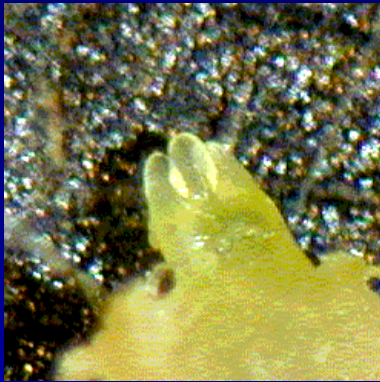
Cropping House 1



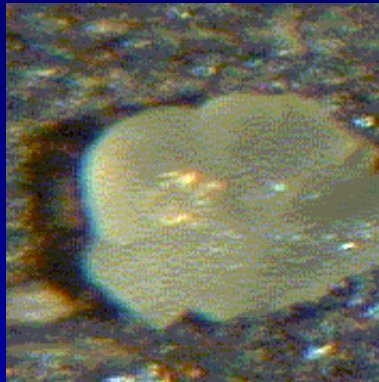
Year 1 Preliminary Results



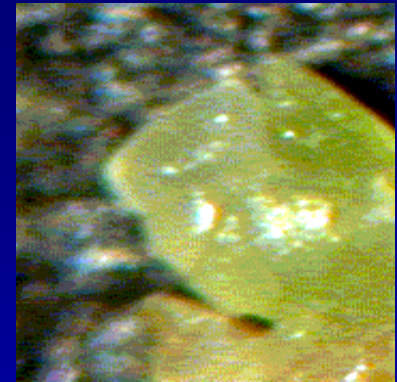
(Savini 2002)



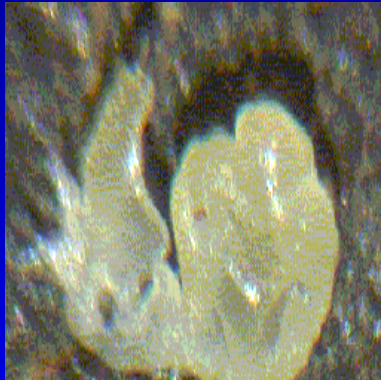
PHASE 0 (VEGETATIVE)



PHASE A



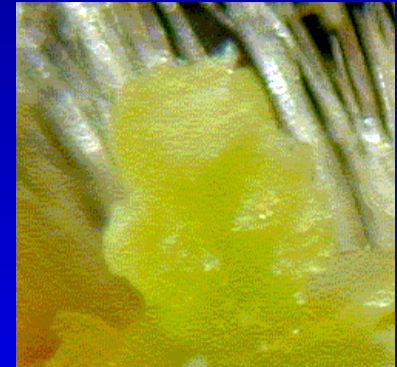
PHASE B



PHASE C



PHASE D



PHASE E



PHASE F



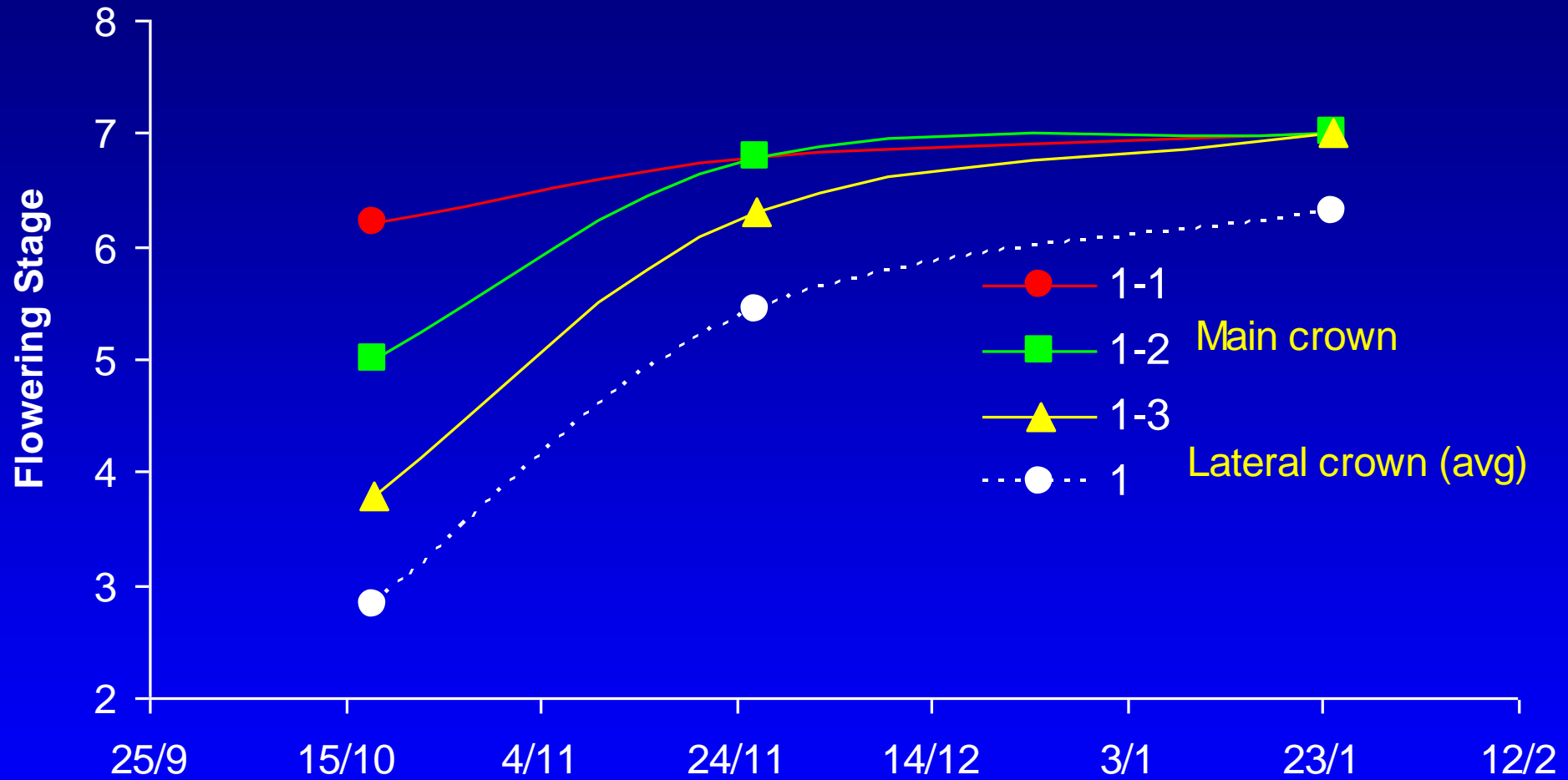
PHASE G



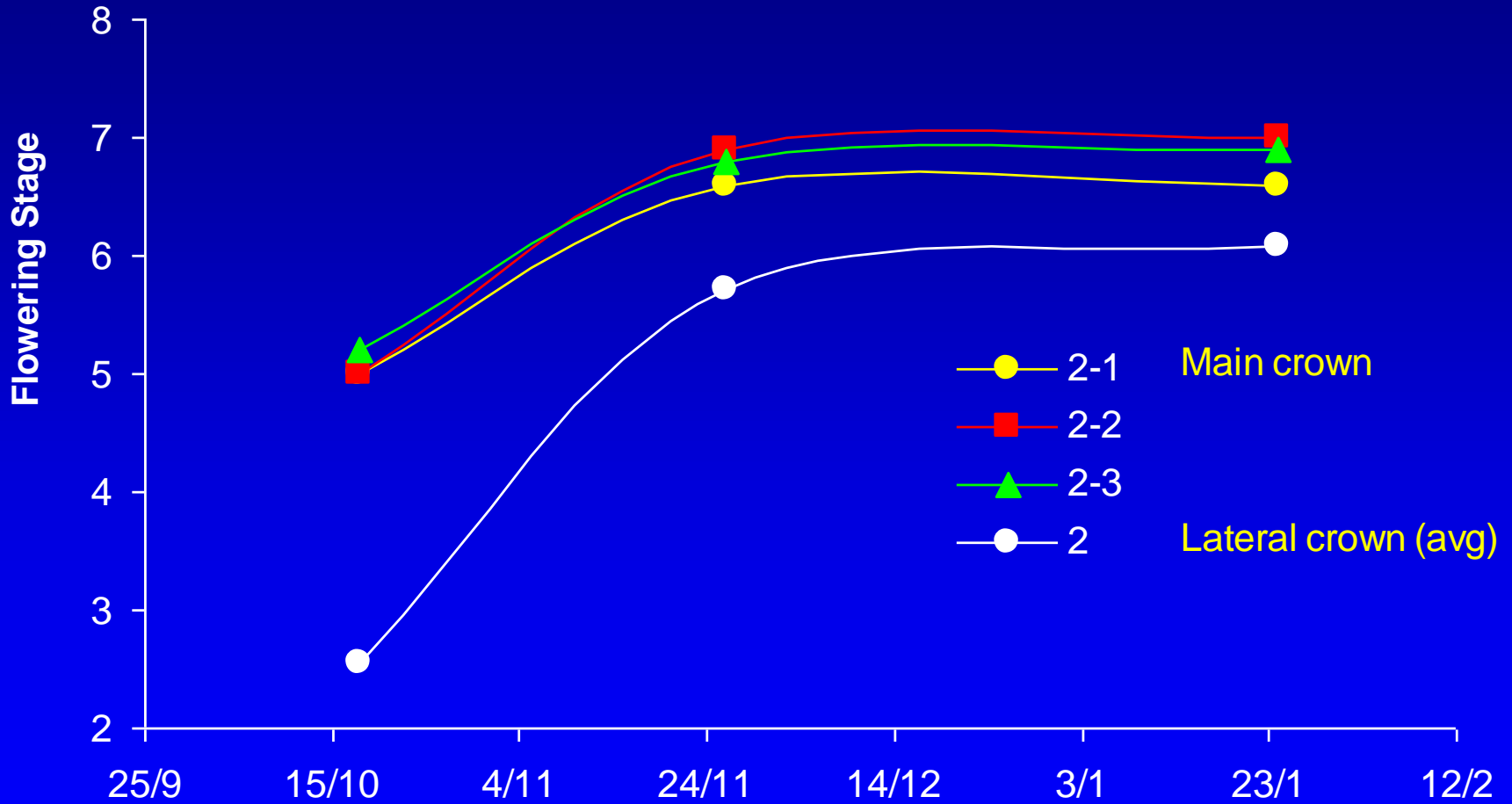
PHASE H

Flowering stage of primary flower (main and lateral crowns)

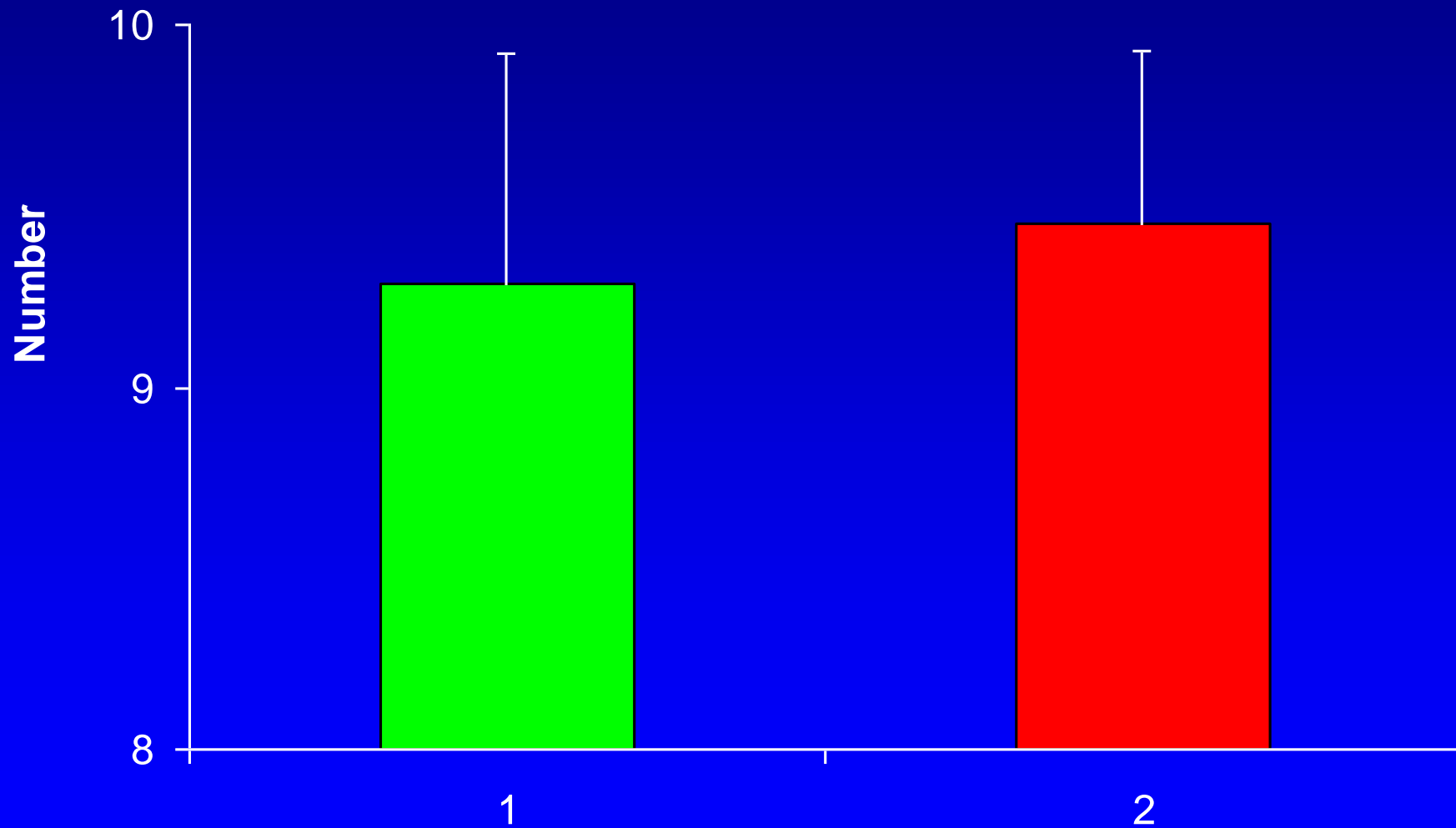
Time 1



Flowering stage of primary flower (main and lateral crowns) Time 2

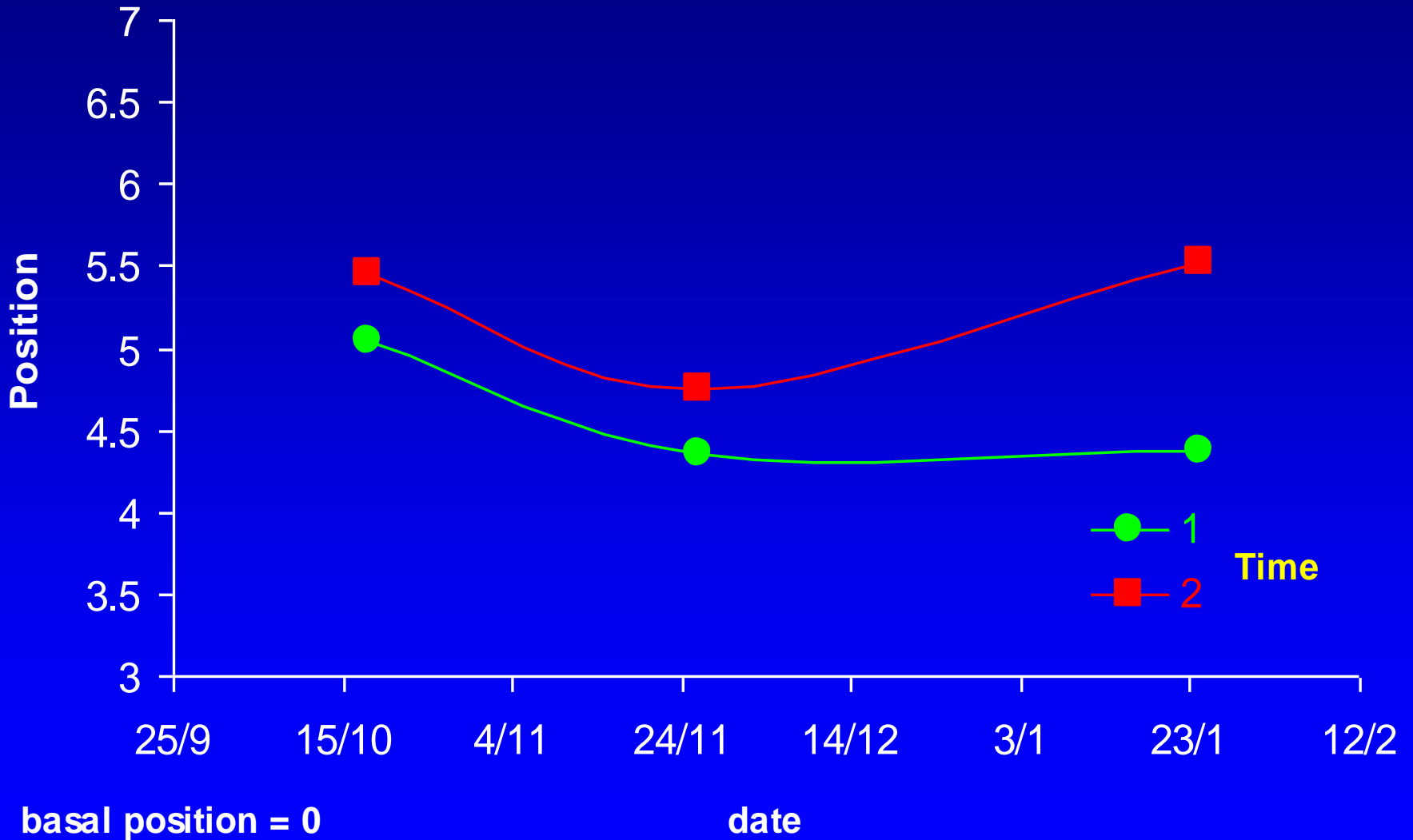


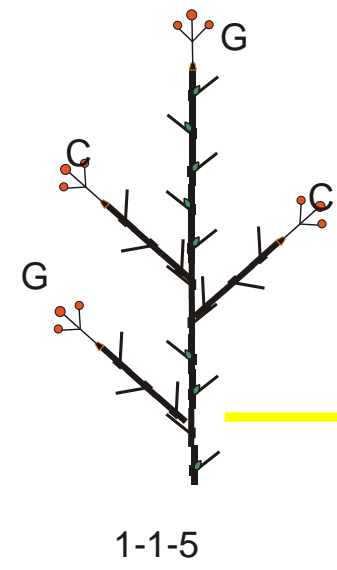
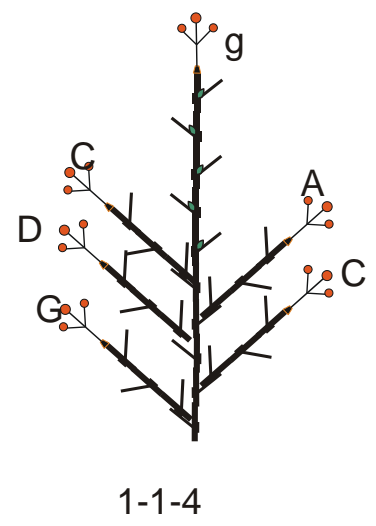
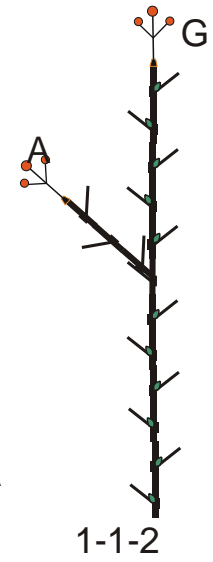
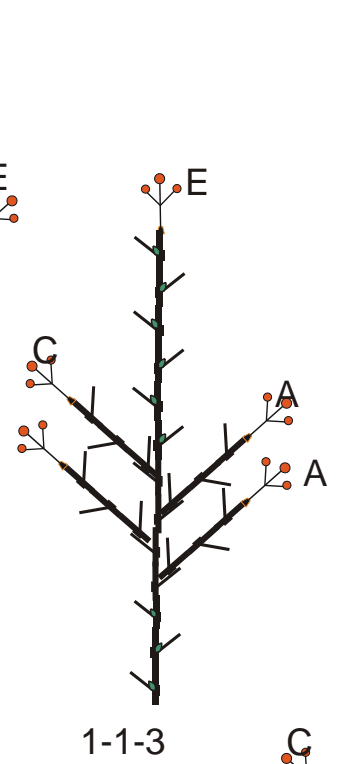
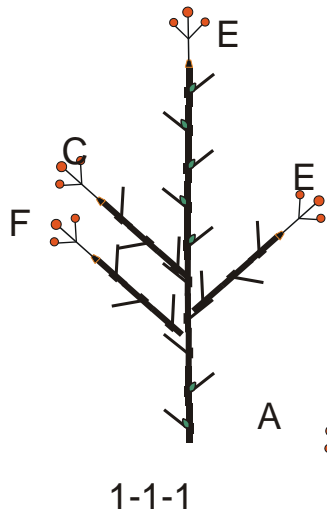
Number of flowers in apical cluster Time 1 and 2



Position of lateral crowns along the main crown axis Time 1 and 2

apical





Bad ?

Good ?





Early Conclusions

- **Architecture of flower very useful method to determine quality of plant material**
- **Fruit data to come: yield, fruit quality etc.**
- **Next year(s): adjust timing of taking tips, nutrition and indoor V outdoor plants**