

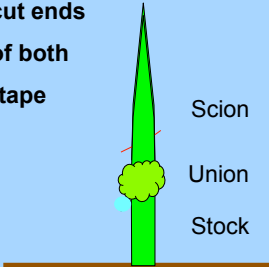



Grafting

Joining One Plant to Another “Permanently”
Creating a Chimera

Grafting Process:

- Select graft-compatible species (close relatives)
- Match stem diameter of rooted cutting and small branch
- Mirror image cuts on both cut ends
- Align the vascular cambia of both
- Tape the joint with grafting tape
- Seal with grafting wax



Three Good Reasons To Graft

Reason	Scion	Stock
Dwarfing	Apple/pear tree	Quince shrub
Cold Hardiness	Hybrid tea rose	Hardy wild rose
Disease Resistance	French wine grape	American fox grape

Two Poor Reasons To Graft

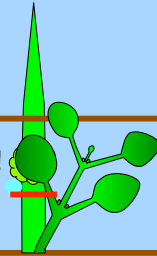
Reason	Scion	Stock
Pollination, Space	Multiple cultivars	Vigorous wild apple
Avoid Cops	Hops: <i>Humulus lupulus</i>	Marijuana: <i>Cannabis sativa</i>

Multiple Varieties Tomato Potato
Competition: is the playing field level?

Δ9-THC is a product of leaf glands...not roots!

Installation and Maintenance of Grafted Plants

- Do not bury the graft union!
 - Callus grows roots
 - Dwarf becomes tall
 - Hardy becomes winterkill
 - Resistant becomes susceptible
- Prune root sprouts mercilessly!
 - Shoots on self-roots are fierce competitors
 - Vigorous root sprouts shade scion
- Never prune off the ugly union and scion!
 - You are left with just a cheap stock plant



A properly installed and maintained grafted tree



HGIC, U of MD

http://plantdiagnostics.umd.edu/_media/client/diagnostics/gallery/normal_bulging_graft_1.JPG