Citrus propagation

UCDAVIS COLLEGE OF AGRICULTURAL & ENVIRONMENTAL SCIENCES

fact sheet

About propagation

Citrus can be propagated by seed, cuttings, grafting or budding (See Table).

	Seed	Cuttings	Grafting	Budding
				
Advantages				
	Most citrus has seed Most citrus is polyembryonic Can plant seed any time of year	Usually easy to do Can make cuttings most of the year	Can provide size regulation and pest resistance Larger pieces of scion is easier to handle	Can provide size regulation and pest resistance Small amounts of scion needed Little expertise needed Know within 2 weeks if budding is successful
Disadvantages				
	Some varieties are seedless Some varieties are monoembryonic Seed can take months to germinate Juvenile trees are very thorny Long time to bearing age	uses a lot of scion material many varieties susceptible to soil pathogens no size regulation of resulting tree	uses a lot of scion material requires rootstock, supplies requires higher level of expertise can only be done at certain times of year	requires rootstock, supplies can only be done at certain times of year

Bud selection	Rootstock selection
From a healthy, fruiting tree	compatible with scion
cut bud stick from hardened growth of last flush	gives size of tree desired
or, cut bud stick from next to last flush	suitable for soil conditions, insects, diseases
round twigs are easier to bud than angular twigs	pencil-thickness
budwood may be refrigerated for weeks to months if sanitized	bark must be slipping

Bud grafting is most successful when the trees are actively growing and when the bark “slips” easily – e.g., in the spring when temperatures are warm (February-May). Grafting (scion to rootstock grafting) may be done any time but it is best to avoid low temperatures and frost.

1. Bark pocket

2. Cut bud

3. Insert and wrap bud

4. Bud at 4 weeks

Prepared by and Louise Ferguson and Mark Bell, June 16 2007

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