



Welcome!

# Sustainable Vegetable Gardening, part 2: Seeds & Seedlings

March 1, 2020

UC Master Gardeners of Napa County



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# Housekeeping Details

Introductions

Did you sign in and verify your email address?

Restrooms down the hall

Compostable disposables

Weeding



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# Homework:

# Germination Test



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# What are seeds?

“The seed contains an ***embryonic plant*** in a ***dormant state*** of development along with ***food reserves*** to sustain it through ***germination.***”



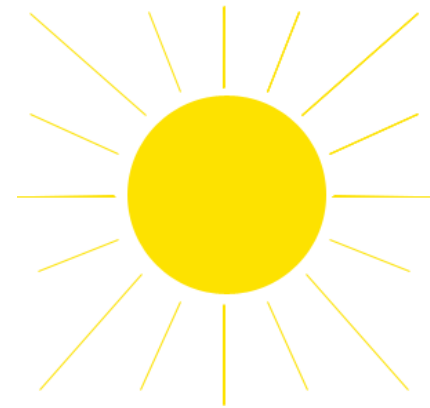
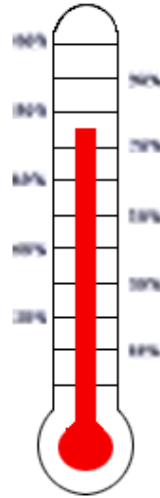
# Why start from seed? (Either direct or transplants)



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Germination:  
**Activating the dormant embryo**



Seed dependent



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# Ideal seed starting conditions

- Sterile seed mix, not garden soil
- Clean container
- Warm, moist soil
- Light dependent on seed type



# Starting seeds in pots



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# Examples of seed starting containers



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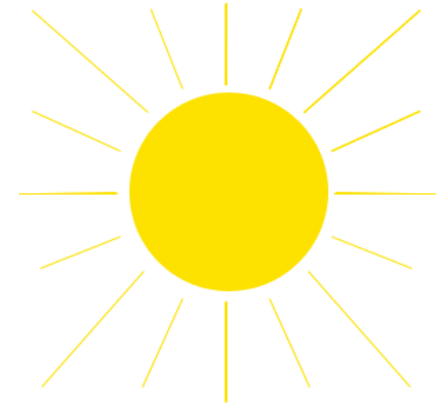
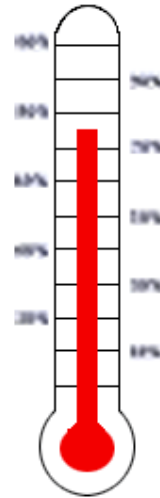
# Providing warmth



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# Caring for seedlings



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# Watering seedlings



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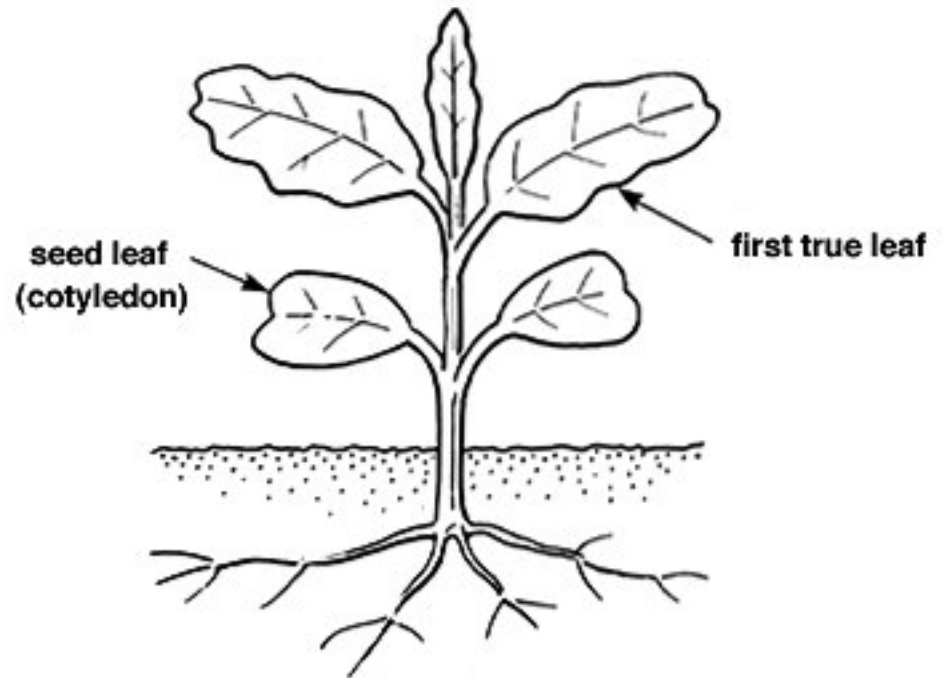
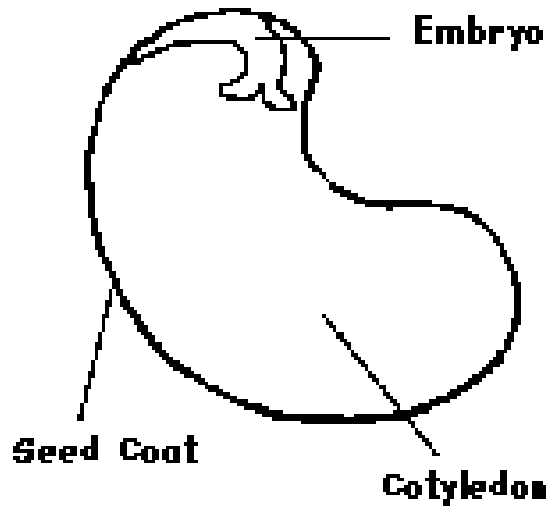
# Light for seedlings



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# Cotyledons



Cotyledons and true leaves



Cucumber



Tomato

Pepper



# How to select healthy plants in the nursery



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# Make your own seed mix

Ideal characteristics of a germinating medium:

Fine and uniform in texture

Well aerated and loose

Free of insects, disease organisms and weed seeds

Low in total soluble salts

Able to hold moisture yet drain well



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# Make your own seed mix

Possible ingredients:

Compost, commercially made

Coir, sustainable substitute for peat

Sand

Perlite

Vermiculite



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# Hands On Activities

Seed mixes  
Starting seeds  
Up-Potting seedlings



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# Deciding what to grow



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## Vegetable Garden Planning Chart

Vegetable							
number of plants							
space needed							
direct seed or transplant							
when to plant							
temp reqm'ts cool or warm season							
approx days to harvest							
estimate harvest timeframe							
supports req'd							
when to start transplants							
notes							
<b>ACTION</b>							
when to take out							



# Timing, direct seed & transplanting



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# HEALTHY GARDEN TIPS

Web site: <http://cenapa.ucdavis.edu>

Telephone: 707-253-4221

University of California Cooperative Extension - Napa County

## SUMMER/FALL VEGETABLE PLANTING GUIDE FOR NAPA COUNTY

(From Robert F. Norris, Botany Dept. U.C.D., Prepared 10/98)

VEGETABLE	JULY	AUG	SEPT	OCT	NOV	DEC	JAN	FEB	MARCH	APRIL	MAY	JUNE	JULY	NOTES/COMMENTS
Broccoli		Plant seeds	Plant seedlings		Harvest	Harvest	Harvest	Harvest	Harvest	Harvest				
Brussel Sprouts	Plant seeds	Plant seedlings			Harvest	Harvest	Harvest	Harvest	Harvest					
Cabbage		Plant seeds	Plant seedlings			Harvest	Harvest	Harvest	Harvest					"Early" types could be planted up to 10 days later
Carrots		Plant seeds				Harvest	Harvest	Harvest	Harvest					
Cauliflower		Plant seeds	Plant seedlings		Harvest	Harvest								
Fava Beans					Plant seeds					Harvest	Harvest			
Kohlrabi		Plant seeds	Plant seedlings		Harvest	Harvest	Harvest	Harvest		Plant seeds indoors/in greenhouse	Plant seedlings		Harvest	Best to do spring planting near beginning of period shown
Lettuce		Plant seeds	Plant seedlings		Harvest	Harvest	Harvest							Planting and harvesting season depends greatly on type
Onions	Plant seeds	Plant seeds	Plant seedlings			Plant seedlings			green onions			bulbs		
Peas (early and late varieties)					Plant seeds				Harvest	Harvest				
Potatoes	Plant seeds				Harvest									Harvest and store
Radish			Plant seeds	Harvest	Harvest	Harvest								
Red Cabbage		Plant seeds	Plant seedlings			Harvest	Harvest	Harvest	Harvest					
Rutabaga	Plant seeds	Plant seedlings	Plant seedlings	Plant seedlings	Plant seedlings	Plant seedlings	Plant seedlings	Plant seedlings	Plant seedlings					
Spinach				Plant seeds				Harvest	Harvest					
Turnip		Plant seeds			Harvest	Harvest	Harvest	Harvest	Harvest					

Code:

Plant seeds

Plant seedlings

Harvest

Range of season

Plant seeds indoors/in greenhouse



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# For next week

- Fill in planting exercise
- Bring any garden bugs.
- Bring samples of weeds.



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