



*Yankton*  
*Seed Library*

# Presented by Missouri Valley Master Gardeners



# Starting Seeds

## Advantages:

- Save money
- Go organic
- Experiment-varieties
- Set your own schedule
- Grow a gardener

## Disadvantages

- Equipment
- Time consuming
- Timing
- Light



# Know your frost date

Average dates of last frost

- Zone 4: May 10
- Zone 5a: April 30
- Start indoors 6-8 weeks prior to expected planting date
- A good guide to remember: Mother's Day



# Germination Times

- FLOWERS
  - Range from 4 to 20 days
  - Many seeds are very small and need only a sprinkle of covering
- VEGETABLES
  - Range from 5 to 20 days
  - Some require added heat to germinate

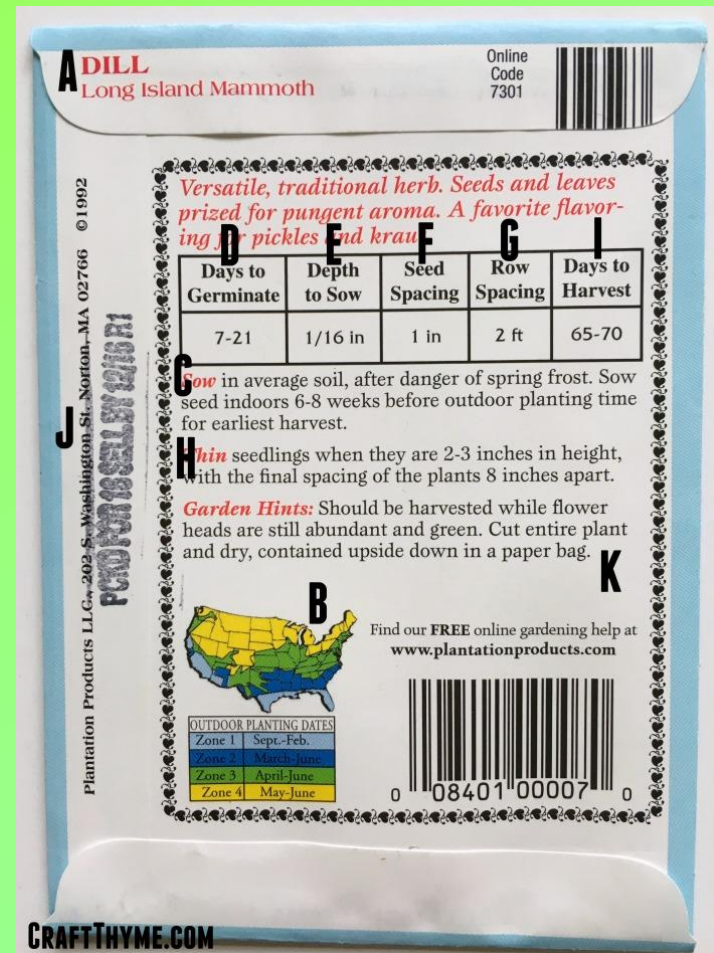
2018 APRIL

Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30			

GoodSheets.com

# Seed Packet 101

- A. Name / Variety
- B. Zone planting
- C. How to plant
- D. Germination
- E. Depth to sow
- F. Seed spacing
- G. Row spacing
- H. Thinning
- I. Days to harvest
- J. Sell by date
- K. Extra information



# Test Germination



- Fold paper towel into fourths
- Place into a zip-lock plastic bag
- Moisten until damp
- Place 5-10 seeds on towel & seal bag
- Determine germination percentage; plant accordingly

# Special Treatment

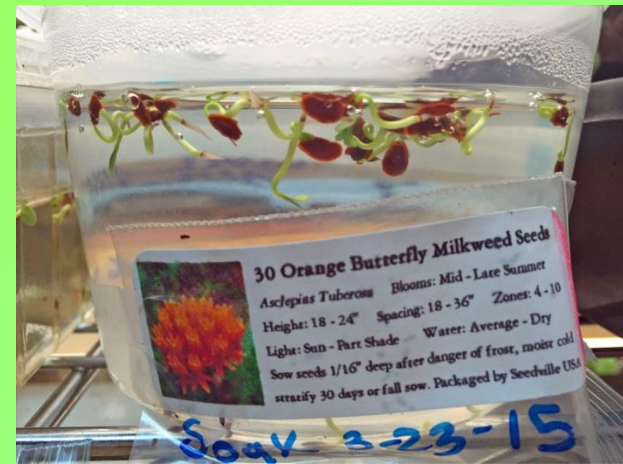
Stratification: break down seed coat

- Temperature
  - Refrigerate in sealed container
- Water
  - Soak in warm water for 12-24 hours; plant immediately

Butterfly bush, catmint  
Nasturtium, sunflowers, sweet peas, peas, corn, squash, melons

Scarification: scratch or nick hard seed coat

morning glories, purple hyacinth beans, cannas





# Gather Supplies

- Starting mix
- Containers
- Tweezers
- Heat mat (optional)
- Lights
- Timer (optional)
- Fan (optional)



# Containers



- Commercial plastic pots
  - Sterilize if reusing (1 part bleach: 10 parts water)
- Recycled plastic cartons
- Styrofoam cups
- Newspaper pots

# Starting Mix

Needs to be light-weight and sterile

- Commercial
- Mix your own:
  - 4 parts screened, sterile compost
  - 1 part perlite
  - 1 part vermiculite
  - 2 parts coir (coconut fiber) or sphagnum moss



NOT garden soil!

# Planting

- Moisten starting mix
- Label container
- Fill container close to top
- Plant seeds
- Mist with water
- Cover with plastic
- Keep out of direct sunlight
- Control temperature

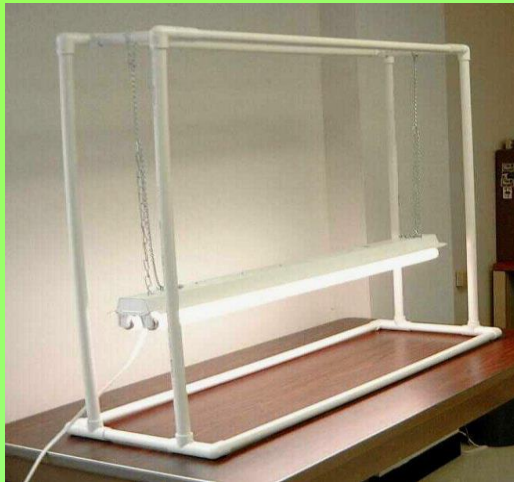


# Light & Water

- Natural light hard to provide
- Fluorescent light
  - 16 hrs / day
  - 1 warm, 1 cool bulb
  - Keep close to plants (2-5" above leaves)
- Water from below (capillary mats); mist from above



# Light sources



DIY with shop lights



Purchased system

# Getting Ready for the Garden



- Use good growing medium: potting soil
- Transplant when 2 sets of leaves
- Fan provides wind
- Harden
  - Start with 1 hr in shade
  - Gradually increase time & sun exposure

# Biodegradable Pots

## Supplies:

Newspaper cut in strips  
(don't use colored  
paper)

Tin can

Instructions





# Resources

- <http://extension.illinois.edu/veggies/broccoli.cfm>  
(growing broccoli)
- <https://extension.psu.edu/vegetable-planting-and-transplanting-guide>
- <https://www.farmforum.net/2018/02/16/igrow-gardening-seed-propagation-and-seed-dormancy/>
- <https://www.youtube.com/watch?v=P8qPAV-LDnM> (paper pot video)
- Richerson, Sheri Ann, The Complete Idiot's Guide to Seed Saving & Starting, 2012.

# Vegetable of the Month: Broccoli

