Small Garden BIG YIELDS

Using the Sprout Method

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WHY SOME PEOPLE DON'T GARDEN

- Time
- Space
- Perceived Difficulty
- Different Activity Preference
- Costs
- Knowledge
- Gardening challenges
- Wasted Effort

Growing a Vegetable Garden Offers Several Benefits:

The SPROUTS Method first started as a kit primarily based on Resources from:

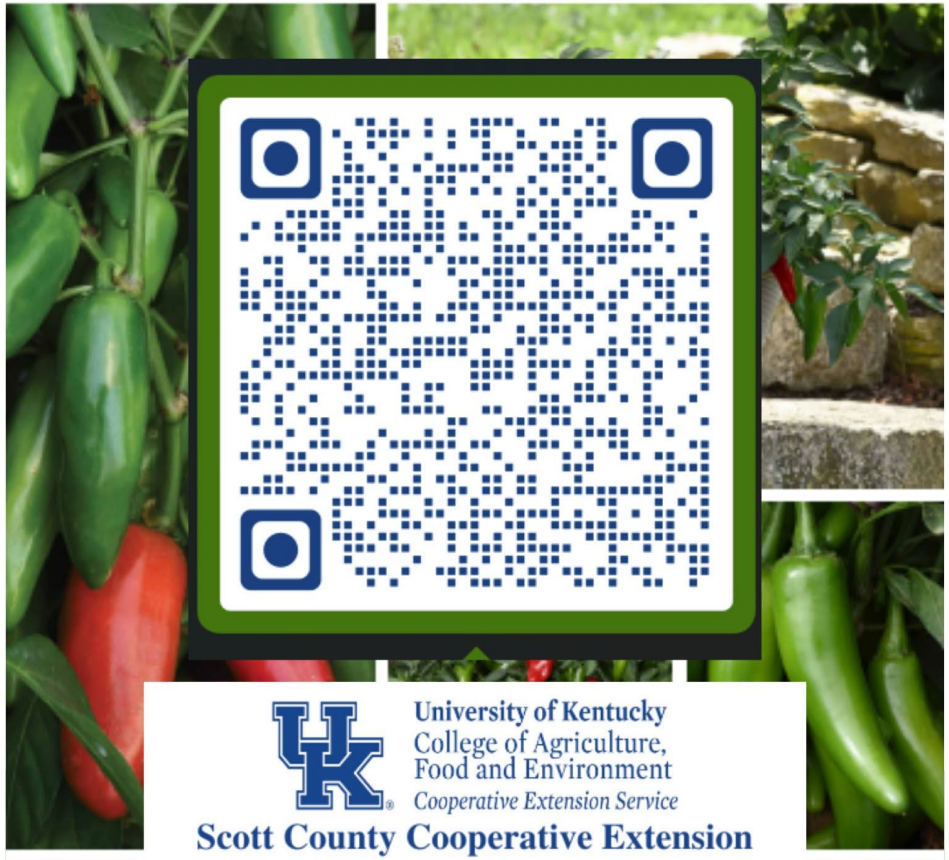
- *the R.E.A.P. Initiative and seed box, by the University of Tennessee Cooperative Extension Program*

- *Vegetable Gardening information is sourced from the University of Kentucky College of Agriculture, Food and Environment, Publication ID-128, Home Vegetable Gardening in Kentucky*

ID-128

University of Kentucky
College of Agriculture,
Food and Environment
Cooperative Extension Service

Home Vegetable Gardening in Kentucky



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Horticulture Program

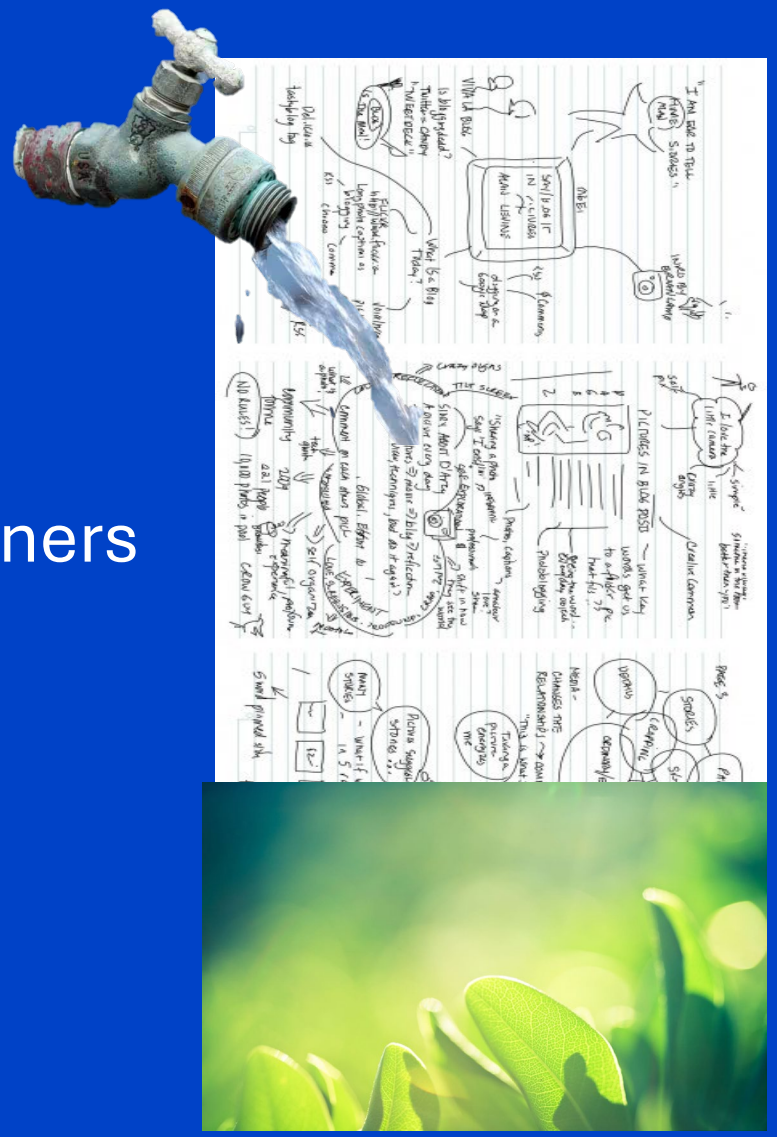
Kentucky Extension
Master Gardener

- The Sprouts Garden Vegetable Kit (including booklet) was created collaboratives by Scott Co. Extension Master Gardener Volunteers and Sharon Flynt, Scott Co. Cooperative Extension Agent for Horticulture. The Kit boxes contained a booklet with directions and garden plans, seeds, peat pellets to start seeds

The SPROUTS Method

- Structured approach to gardening
- Provides the plan for the gardener
- Suggests vegetables suitable for spring, summer fall gardening
- The method aims to maximize the yield in a ***manageable*** garden space
- Focuses on careful planning, soil preparation, and proper planting techniques
- Promotes sustainable practices and ongoing soil improvement for long-term gardening success

IMPERATIVE!



- Plan on paper
- Start small;
- Size is manageable for beginners
- Choose a
  - Sunny
  - Level
  - Well-drained site
  - Good air circulation
  - Water close

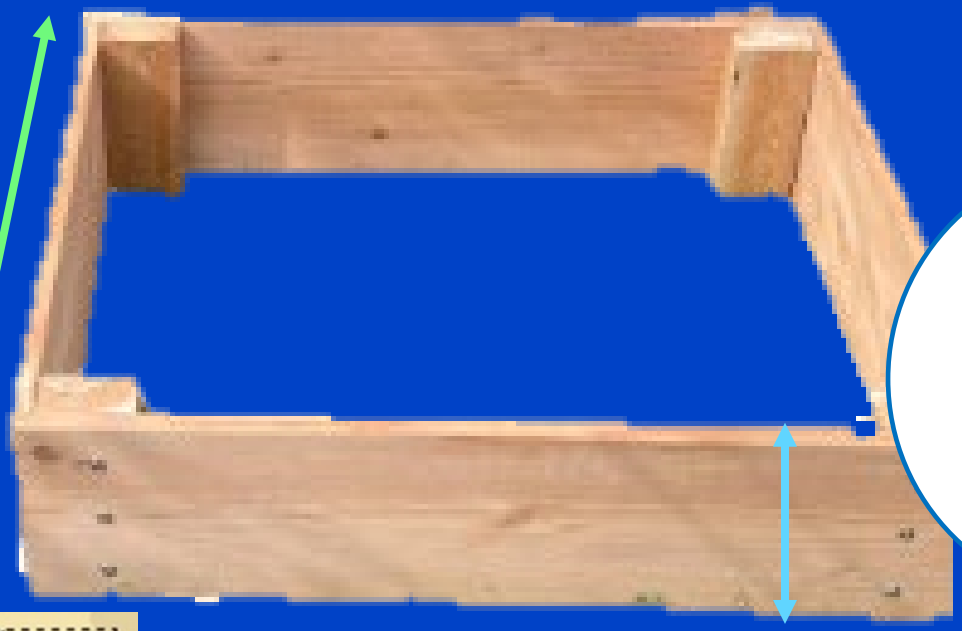
Preparing a New Garden Site

- Mark off a 4-foot x 4-foot area and cover it with cardboard or plastic to kill the grass
- Once the soil is workable in spring, remove the cover and rake away the debris
- Turn over the sod by rototilling or hand spading, preparing the soil to a depth of at least 8 inches
  - Increase the depth to 10-12 inches over the years
  - Avoid working the soil when it’s very wet; it should crumble easily to proceed safely

Consider a Raised Bed

- Two - 8 feet long - 2 x 10” non-treated lumber or other; CUT IN HALF
- 3-inch deck screws or Bolts and washers, etc.
- 4 X 4 untreated; cut into 4 equal lengths

4 FEET - square



tomato	cucumber	pole beans	pole beans
broccoli	broccoli	pepper	pepper
beets	cabbage	spinach	parsley
onions	leaf lettuce	carrots	radishes

10 INCH

Working Toward the Best

- An ideal garden soil features a 10 to 12-inch loamy surface over a well-drained subsoil, retaining water while draining effectively after rain
- Add a 2-inch layer of compost every year and work it into the soil
- It should contain sufficient minerals for optimal growth, with a pH between 6.2 and 6.8 (hence the recommendation for soil testing)
- Few home vegetable garden sites will meet all these criteria, but crops can still thrive in variable conditions.
- Most soil types can be modified to improve growing conditions

RAISED BED SOIL MIXTURE

- Remove grass
- Thoroughly till it into the underlying soil
- Add four to six inches of finished compost, peat moss or/well-rotted manure to the existing SOIL
- Work or till in

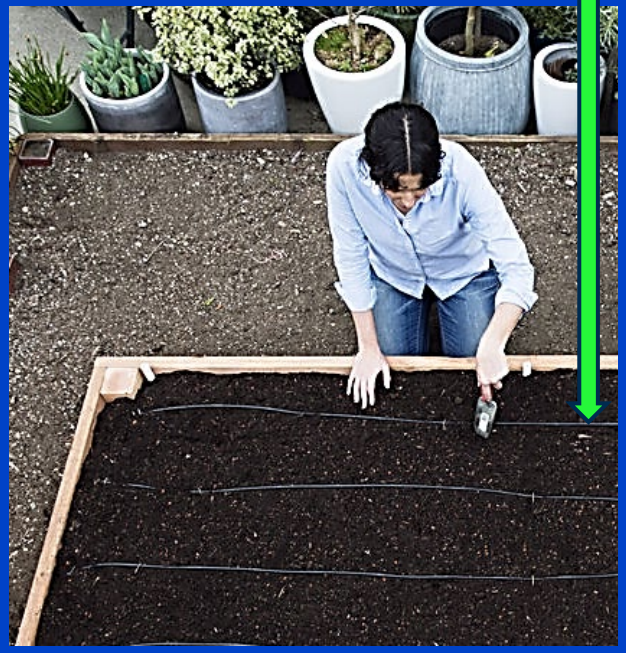
BUT

- Tillage will not be a normal practice in the raised bed

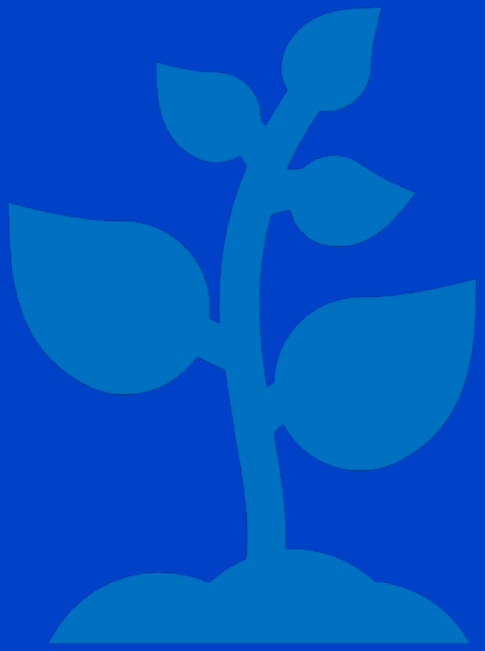
Planting

- The soil can be moist at planting time, but not overly wet
- Test for moisture content by squeezing a handful of soil
- It is ready to plant if it crumbles readily in your palm rather than
- sticking together

Grid Lines with String



After Planting



- Remember to keep moist, as seeds need moisture to germinate.
- Also, some seeds take longer to germinate (3 to 4 weeks for carrots & parsley, compared to 3 -7 days for lettuce or radishes)
- Moral of that story . . . HAVE PATIENCE & Don’t Give UP!

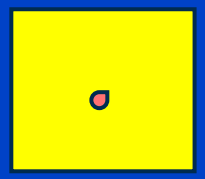
ACCORDING TO THE SEASON:

- Follow the subsequent plan diagrams to avoid overcrowding and thin seedlings as needed
- Plant crops in their appropriate season (after danger of frost)

PLANTING PATTERNS PER SQUARE FOOT

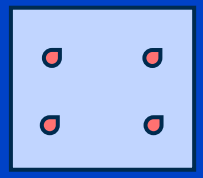
(1 square equals 1 foot) ***Lay out your grids with string to help guide***

1



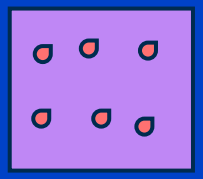
One (1) seed/plant per 1 square foot block

4



Four(4) seeds/plants per 1 square foot block

6



Six (6) seeds/plants per 1 square foot block

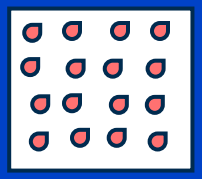
Sow seeds or plant transplants as indicated by the surrounding planting patterns.

All vegetables recommended in this tutorial can be planted either by 1* per square foot, 4 * per square foot, 9 * per square foot, or 16 * per square foot.

Sixteen square feet blocks in a 4’ x 4’ raised bed.

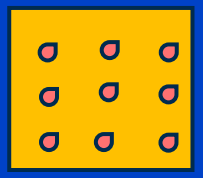
* = seed(s) or plant(s)

16



Sixteen (16)seeds/plants per 1 square foot block

9

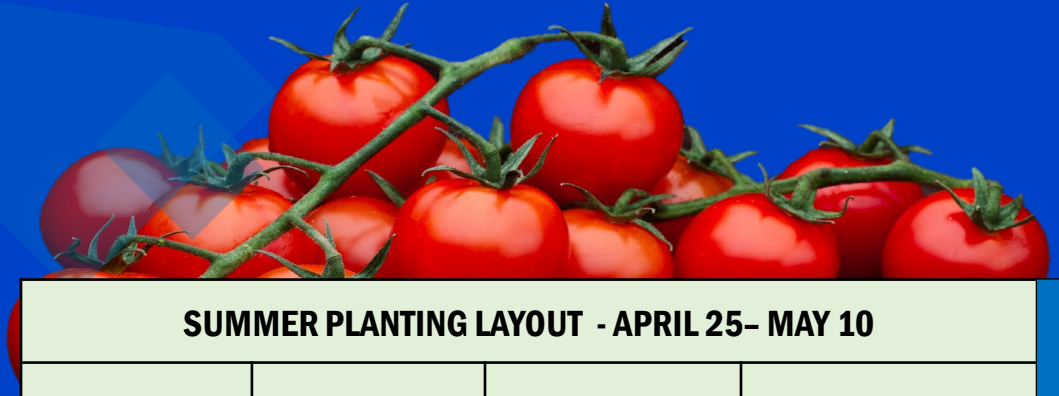


Nine (9)seeds/plants per 1 square foot block

Follow the diagram guide for planting 4 seeds

FALL PLANTING LAYOUT - AUGUST 1– SEPTEMBER 1			
CUCUMBER *EXISTING*	*TOMATO* *EXISTING*	*TOMATO* *EXISTING*	*TOMATO* *EXISTING*
KALE - 4	*PEPPER* *EXISTING*	*PEPPER* *EXISTING*	TURNIP – 9 PURPLE TOP
KALE - 4	*PARSLEY* *EXISTING*	*OKRA* *EXISTING*	SPINACH - 6 BLOOMSDALE
BASIL *EXISTING*	*CARROT* *EXISTING*	LETTUCE - 4	KOHLRABI - 4 PURPLE VIENNA

LATEST SAFE PLANTING DATES FOR CENTRAL KY*	
KALE	AUGUST 1
KOHLRABI	AUGUST 1
LETTUCE	AUGUST 15
SPINACH	SEPTEMBER 1
TURNIPS	AUGUST 10



SUMMER GARDEN
APRIL 25- MAY 10

SUMMER PLANTING LAYOUT - APRIL 25– MAY 10			
CUCUMBER 1	TOMATO – 1	TOMATO – 1	TOMATO - 1
BUSH BEAN – 4 Roma II	PEPPER – 1	PEPPER – 1	ZUCCHINI – 6 BLACK BEAUTY *REMOVE 3 AFTER GERMINATION*
BUSH BEAN – 4 Roma II	*PARSLEY* *EXISTING*	OKRA – 4	*LEAVE OPEN FOR ZUCCHINI & SQUASH*
BASIL – 1 Genovese	CARROT – 9	CILANTRO – 4	SQUASH – 6 CROOKNECK *REMOVE 3 AFTER GERMINATION*

EARLIEST SAFE PLANTING DATES FOR CENTRAL KY*	
BEANS	APRIL 25
CARROT	MARCH 20
CUCUMBERS	MAY 1
OKRA	MAY 10
PEPPERS^	MAY 1
TOMATOES^	APRIL 25

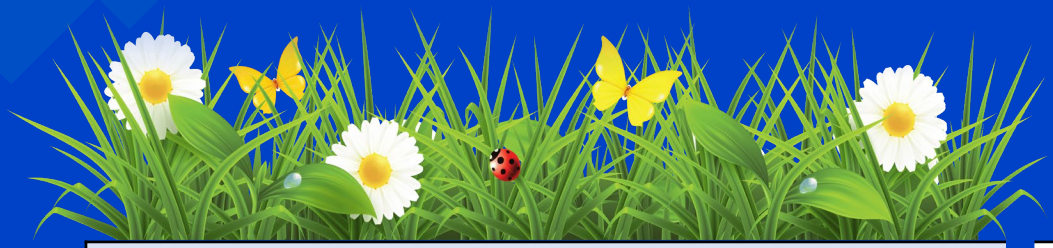
^ Best planted as transplants, but can plant seeds directly in garden

FALL GARDEN
AUGUST 1 – SEPTEMBER 1

FALL PLANTING LAYOUT - AUGUST 1– SEPTEMBER 1			
CUCUMBER EXISTING	***TOMATO EXISTING***	***TOMATO EXISTING***	***TOMATO EXISTING***
KALE - 4	***PEPPER EXISTING***	***PEPPER EXISTING***	**TURNIP – 9 PURPLE TOP**
KALE - 4	***PARSLEY EXISTING***	***OKRA EXISTING***	**SPINACH - 6 BLOOMSDALE**
BASIL EXISTING	***CARROT EXISTING***	**LETTUCE - 4**	**KOHLRABI - 4 PURPLE VIENNA**

LATEST SAFE PLANTING DATES FOR CENTRAL KY*	
KALE	AUGUST 1
KOHLRABI	AUGUST 1
LETTUCE	AUGUST 15
SPINACH	SEPTEMBER 1
TURNIPS	AUGUST 10

SPRING GARDEN
MARCH 1 – MARCH 25

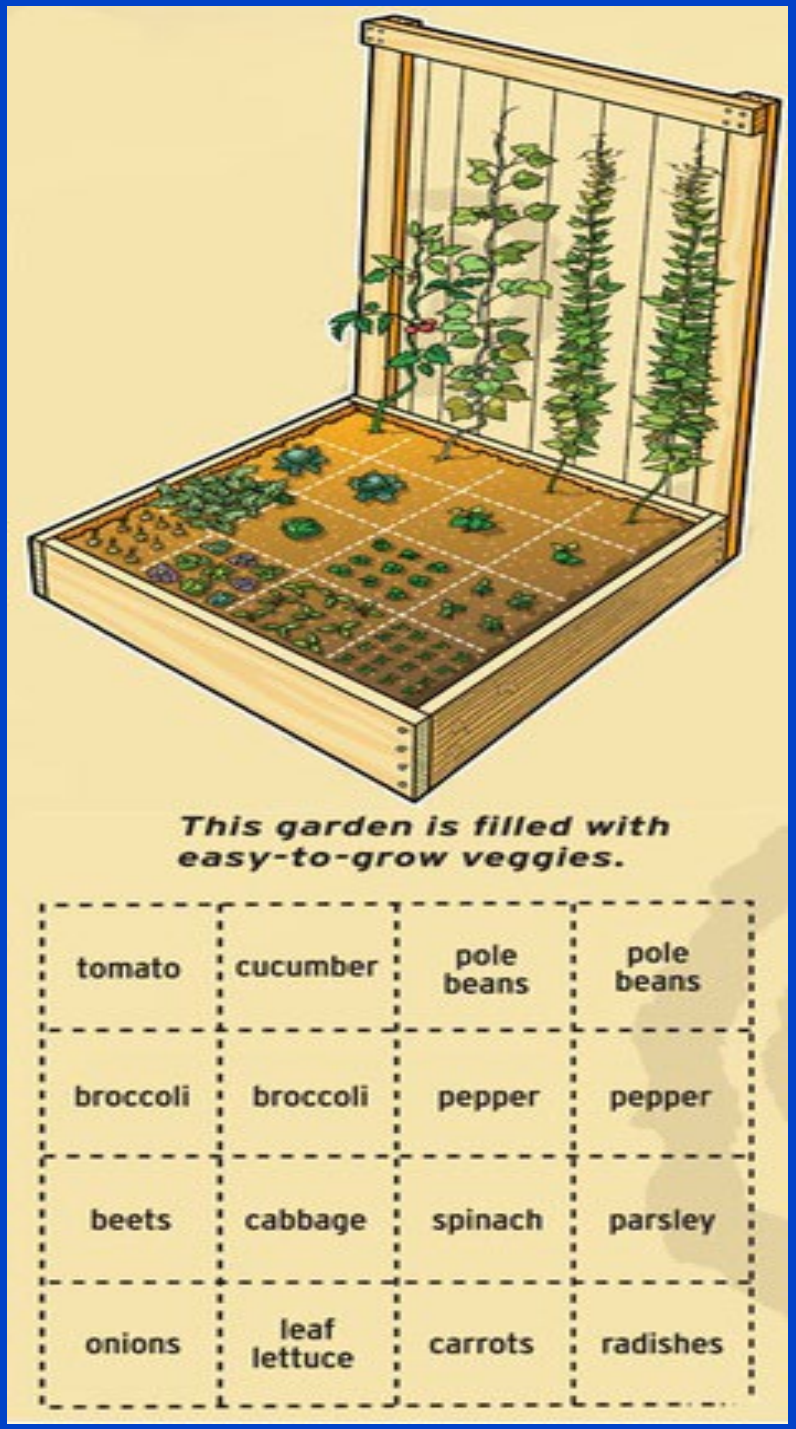


SPRING PLANTING LAYOUT MARCH 1 – MARCH 25			
PEAS – 4 SUGAR ANN	PEAS – 4 SUGAR ANN	PEAS – 4 SUGAR ANN	PEAS – 4 SUGAR ANN
LETTUCE– 6	LETTUCE – 6	LETTUCE – 6	SPINACH - 6
BEETS – 9	PARSLEY – 4	RADISH – 16	LETTUCE - 4
BABY KALE – 6	LETTUCE – 4	RADISH – 16	BOK CHOY - 6

EARLIEST SAFE PLANTING DATES FOR CENTRAL KY*	
BEETS	MAR 15
BOK CHOY CABBAGE	MAR 25
KALE	MAR 20
LETTUCE	MAR 25
PARSLEY	MAR 20
PEAS	MAR 1
RADISHES	MAR 10

Planning Your Garden

- **Plan on paper**
- **Draw a scale model of your space**
- **Use improved varieties with inherent disease resistance**
- **Use succession planting when possible**



Soil Prep

- **Soil test in fall – at your local extension office**
- **Fertilize in the spring – if needed, based on recommendations**
- **Add organic material every year**
  - **Compost**
  - **Chopped leaves**
  - **Composted manure**

EARLIEST – LATEST PLANTING DATES

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Table 15. Earliest and latest planting dates in the garden in Kentucky. (If producing your own transplants, begin two to 12 weeks earlier than these listed dates. See Table 6.)

	Earliest Safe Planting Date			Latest Safe Planting Date[1]		
Crops	**Western**	**Central**	**Eastern**	**Eastern**	**Central**	**Western**
Asparagus (crowns)	Mar 10	Mar 15	Mar 20		(Spring only)	
Beans (snap)	Apr 10	Apr 25	May 1	July 15	July 25	Aug 1
Beans (lima)	Apr 15	May 1	May 10	June 15	June 20	July 1
Beets	Mar 10	Mar 15	Mar 20	Aug 1	Aug 10	Aug 15
Broccoli (plants)	Mar 30	Apr 5	Apr 10	July 15	Aug 1	Aug 15
B. Sprouts (plants)	Mar 30	Apr 5	Apr 10	July 1	July 15	Aug 1
Cabbage	Mar 15	Mar 25	Apr 1	July 1	July 15	Aug 1
Carrots	Mar 10	Mar 20	Apr 1	July 1	July 15	Aug 1
Cauliflower (plants)	Mar 30	Apr 5	Apr 10	July 15	July 20	Aug 5
Celery	Apr 1	Apr 5	Apr 10	June 15	July 1	July 15
Chard	Mar 15	Mar 20	Apr 1	June 15	July 15	Aug 1
Collards	Mar 1	Mar 10	Mar 15	Aug 15	Aug 20	Aug 30
Sweet Corn	Apr 10	Apr 20	May 1	June 15	July 10	July 20
Cucumbers	Apr 20	May 1	May 10	June 15	July 1	July 15
Eggplant (plants)	May 1	May 10	May 15	June 1	June 15	July 1
Garlic	-	-	-	Nov 1	Nov 7	Nov 15
Kale	Mar 10	Mar 20	Apr 1	July 15	Aug 1	Aug 15
Kohlrabi	Mar 15	Mar 20	Mar 25	July 15	Aug 1	Aug 15
Lettuce (leaf)	Mar 15	Mar 25	Apr 1	Aug 1	Aug 15	Sept 1
Lettuce (bibb plants)	Mar 15	Mar 25	Apr 1	July 15	Aug 1	Aug 15
Lettuce (head plants)	Mar 15	Mar 25	Apr 1	July 1	July 15	Aug 1
Muskmelons	Apr 20	May 10	May 15	June 15	July 1	July 15
Okra	Apr 20	May 10	May 15	July 1	July 15	Aug 1
Onions (sets)	Mar 1	Mar 10	Mar 15		(Spring only)	
Onions (plants)	Mar 15	Mar 25	Apr 1	June 15	July 1	July 15
Onions (seed)	Mar 10	Mar 20	Apr 1	June 1	June 15	July 1
Parsley	Mar 10	Mar 20	Apr 1	July 15	Aug 1	Aug 15
Parsnips	Mar 10	Mar 20	Apr 1	June 1	June 15	July 1
Peas	Feb 20	Mar 1	Mar 15		(Spring only)	
Peppers (plants)	May 1	May 10	May 20	June 15	July 1	July 15
Irish Potatoes	Mar 15	Mar 15	Mar 20	June 15	July 1	July 15
Sweet Potatoes	May 1	May 10	May 20	June 1	June 10	June 15
Pumpkins	Apr 20	May 5	May 10	June 1	June 15	July 1
Radishes	Mar 1	Mar 10	Mar 15	Sept 1	Sept 15	Oct 1
Rhubarb (crowns)	Mar 1	Mar 10	Mar 15		(Spring only)	
Rutabaga	Mar 1	Mar 10	Mar 15	July 1	July 10	July 15
Southern Peas	Apr 20	May 5	May 10	June 15	July 1	July 15
Snow Peas	Feb 20	Mar 1	Mar 15	July 20	Aug 1	Aug 8
Spinach	Feb 15	Mar 1	Mar 10	Aug 15	Sept 1	Sept 15
Summer Squash	Apr 20	May 10	May 15	July 15	Aug 1	Aug 15
Tomatoes (plants)	Apr 20	May 5	May 15	June 1	June 15	July 1
Turnips	Mar 1	Mar 10	Mar 15	Aug 1	Aug 10	Aug 20
Watermelons	Apr 20	May 5	May 15	June 15	July 1	July 15
Winter Squash	Apr 20	May 10	May 15	June 15	July 1	July 15

[1] Based on average of early maturing varieties. Mid-season and late-maturing varieties need to be planted 15 to 30 days earlier than latest date. Nearly all of the fall-planted garden crops will require irrigation during dry periods. Additional insect controls may be necessary for these tender young plants.

Direct Seeding

- Seed planted directly in the garden site
- Works better with some crops
- Start with well-prepared soil
- Plant at proper depth
- Water as needed

  Use shade cloth if necessary

Keep area weed free

Direct Seeding

Crop	Avg. Seeding Date	Seed depth (inches)	Avg. Days to Emerge
Cucumber	May 1	1	3-6
Squash	May 10	1	5-7
Muskmelon	May 10	1	4-6
Watermelon	May 5	1	4-6
Snap Beans	April 25	1 ½	5-7

Transplants

- Follow the seeding/planting diagram
  - Ensures proper spacing
- Use proper planting depth*
- Plant at the correct time (ID-128)*
- Don’t forget to water!

Care During Growing Season

Water

- ✓ One inch per week
- ✓ Water infrequently but thoroughly
- ✓ Wet soil not plant
- ✓ Water early so foliage dries

Mulch

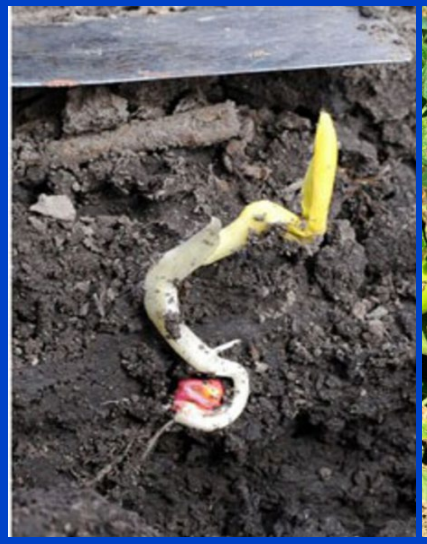
- Reduces water evaporation from soil surface
- Reduces soil temperature
- Prevents Weed Seed Germination
- Reduces weed competition

Weed Control

- Weed by hand in small areas Mulch when possible
- Limit use of chemical controls - use in combination with hoeing and mulch
- Herbicide drift can harm sensitive plants in the same area

Disease Control

- Site selection Sanitation
- Select for disease resistance
- Practice crop rotation
- Regularly inspect plants
- Remove and destroy infested plants



BETTER BOY
Hybrid Tomato

Indeterminate
Disease resistance: V, F, N

- **LIGHT:** Full Sun, 6+ hrs
  LUZ: Sol Directo
- **SPACING:** 36" apart
  ESPACIEMENTO: 90 cm aparte
- **PLANTING DEPTH:** Bury 2/3 of plant
  PROFUNDIDAD DE LA SIEMBRA: Entierre 2/3 de la planta
- **MATURITY:** 70-75 days after planting
  MADURACIÓN: 70-75 días después de la siembra

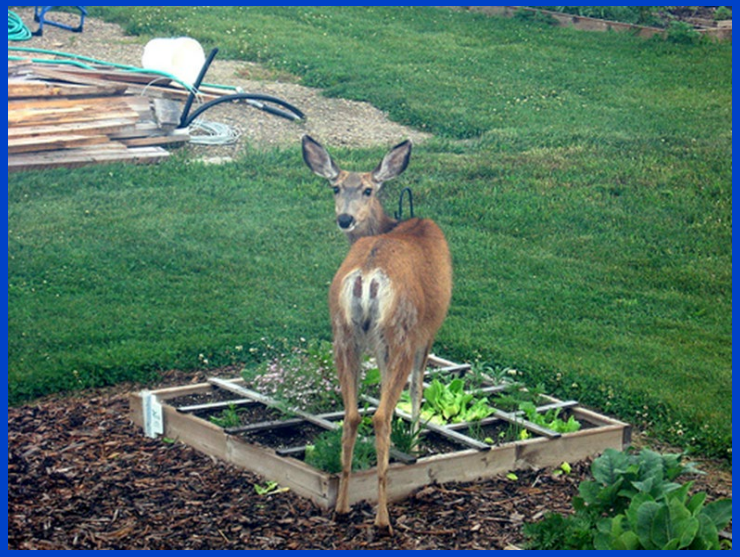
Disease Control

- Seek out Disease Resistant/Tolerant Plant Varieties
- Plant seeds at the right time according to soil temperature
- Control weeds and insects
- Water (soil-applied) and mulch
- Do not work in a wet garden!

UNIVERSITY *of* NEBRASKA–LINCOLN

Institute of Agriculture and Natural Resources
CROPWATCH

RECOGNIZE PESTS AND PEST DAMAGE



Not All Bugs are Bad!

- Encourage beneficial insects
- Predators – ladybugs, spiders, mantids
- Encourage by creating a habitat (flowering plants)

Bad or Beneficial?

End of the Season

- Garden Clean-up
- Cover crops
- Composting
- Record Keeping

Beginner Tips Review

- Start small
- Learn what works for you
- Always try something new every year
- Change how you look at failure

Failure ISN’T FAILURE IF YOU learn from IT

QUESTIONS?


Home Vegetable Gardening in Kentucky
University of Kentucky
College of Agriculture, Food and Environment
Cooperative Extension Service
Scott County Cooperative Extension
Horticulture Program
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