

Gardening



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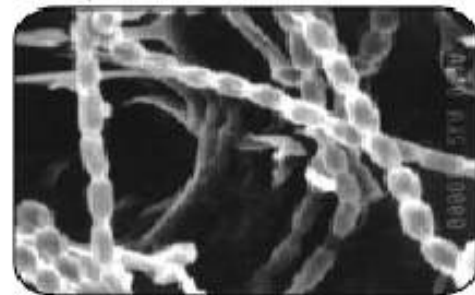
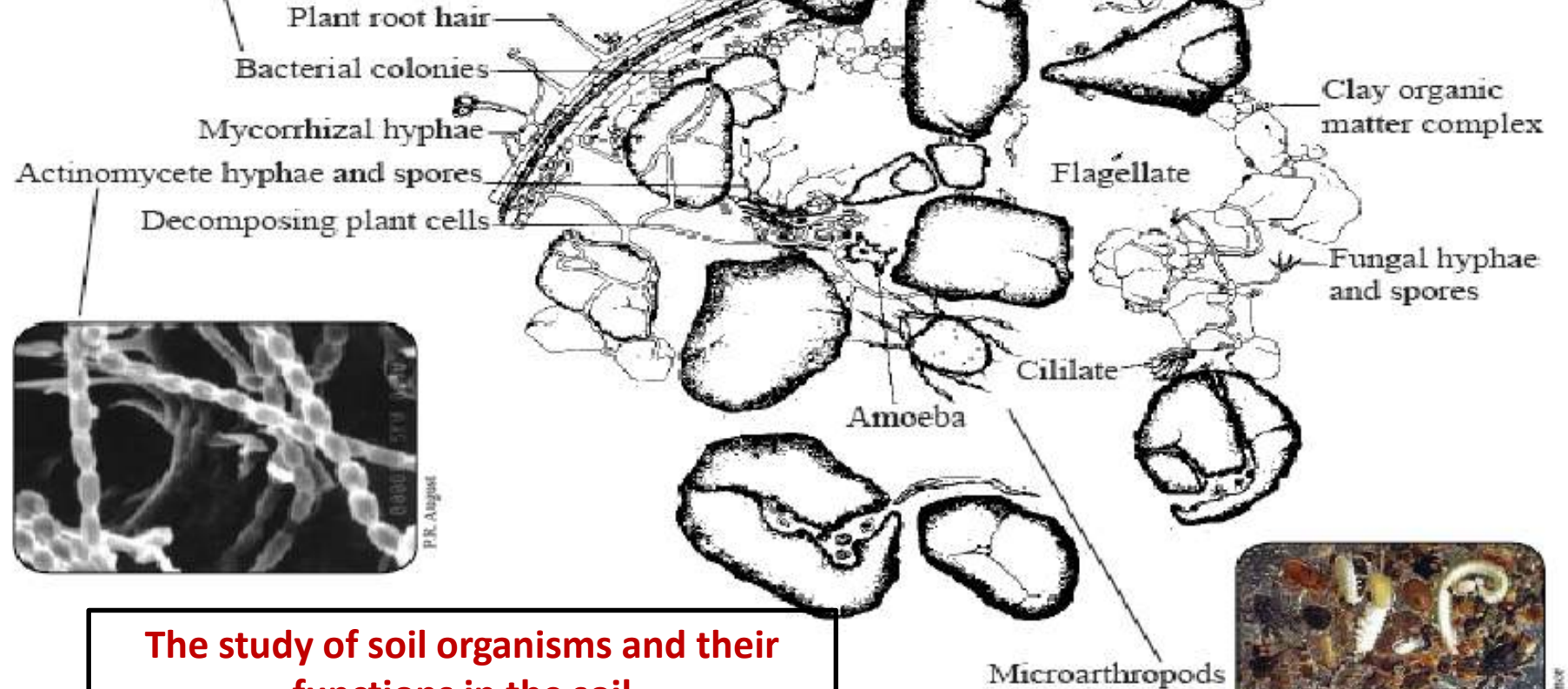
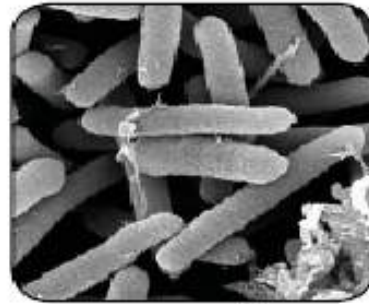
Considerations:

- Soil
- Crop Selection
- Seeding and Transplanting
- Watering
- Diseases and Insects
- Weed control



What is soil biology?

Life in the soil

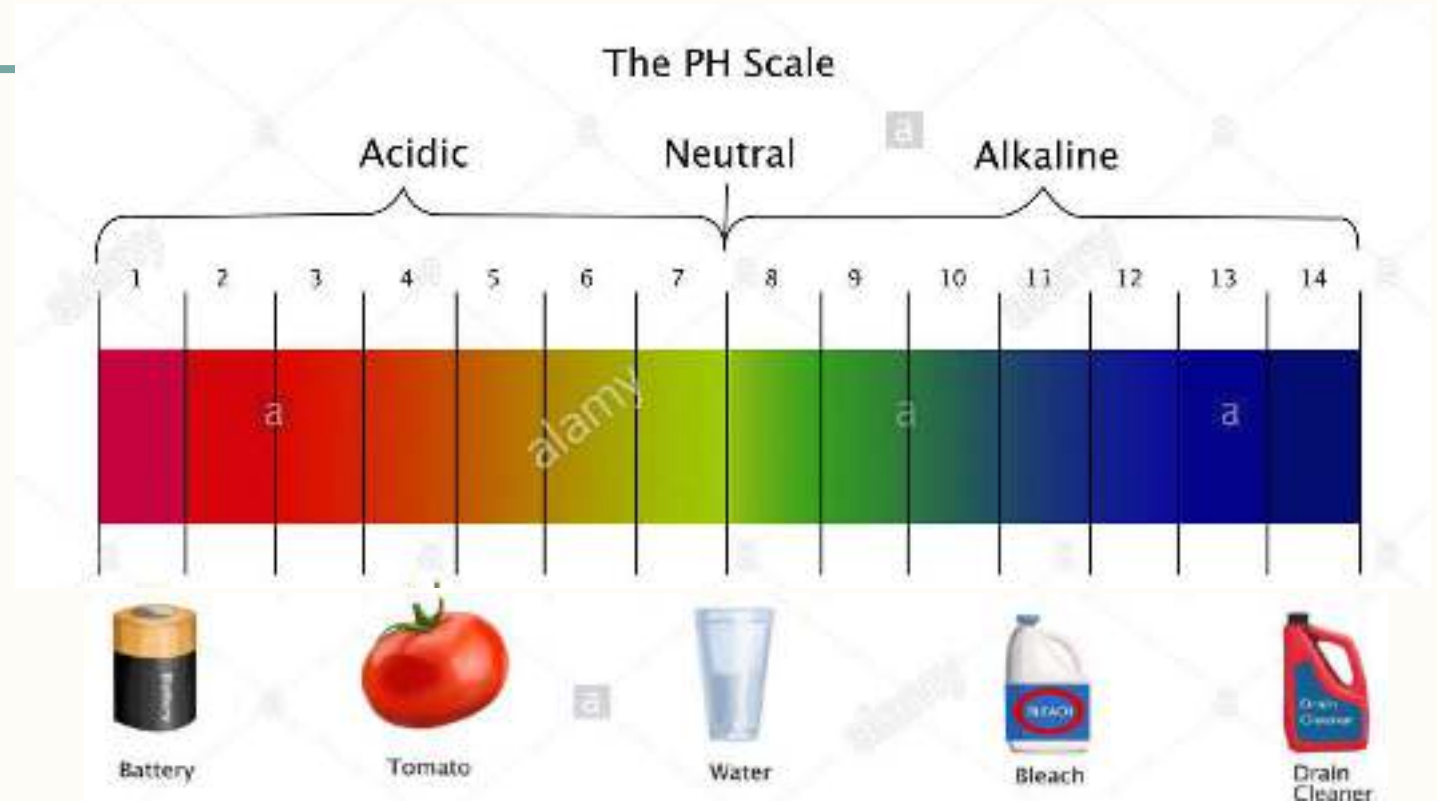


The study of soil organisms and their functions in the soil

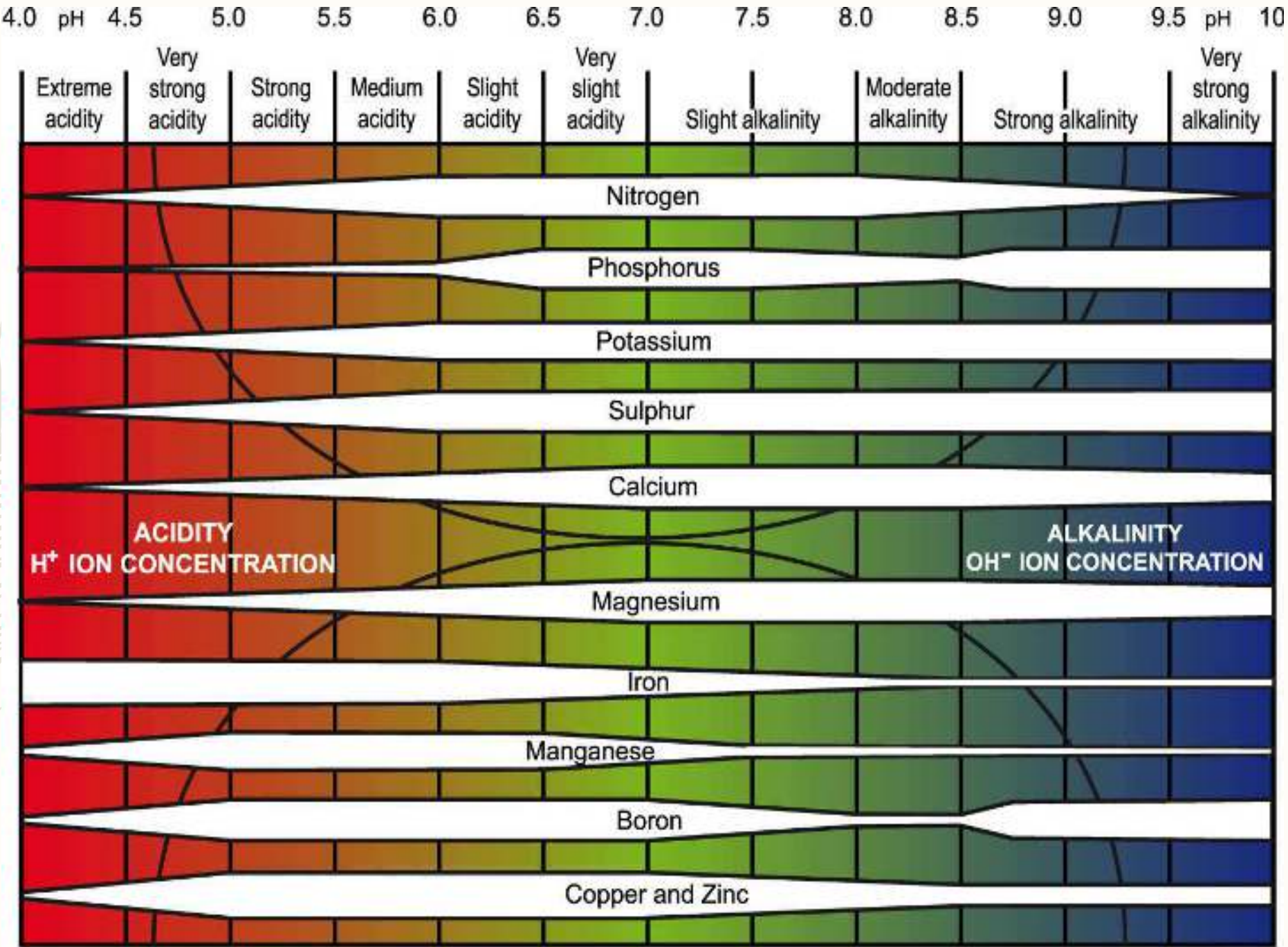
pH

– Soil

– Alkaline



Nutrient Availability



redrawn by PDA from Troug, E. (1946)

The Role of Soil in a Garden

- Removes pollutants and cleanses water
- Absorbs rainfall and mitigates flooding
- Stores water for plants, wildlife and people
- Provides nutrients and oxygen for plants
- Provides habitat for a variety of microbes, plants and animals





CROP SELECTION SEED & TRANSPLANTING



Cool Season Crops		Warm Season Crops	
<ul style="list-style-type: none">• Late Summer/Fall Planting Harvest late-fall through winter.• Early Spring Planting Harvest before school ends.		<ul style="list-style-type: none">• Late Spring (or Summer*) Planting Harvest when returning to school in fall. (Have a plan in place for summer weeding, watering, and harvest.)	
Best to sow directly into Garden Beds	Best to plant transplants into Garden Beds	Best to sow directly into Garden Beds	Best to plant transplants into Garden Beds
Beets Calendula (edible flower) Carrots Garlic Nasturtium (edible flower) Onions Peas Radish Spinach	Asian Greens Broccoli Cabbage Cauliflower Chard Collards Kale Kohlrabi Lettuce Nasturtium (edible flower) Onions	Amaranth Corn Cucumbers* Melons Popcorn Potatoes Pumpkins Shelling Beans Snap Beans* Summer Squash* Sunflowers (with edible seeds) Winter Squash	Eggplant Onions Peppers Tomatoes

Reading a Seed Package

5048

White Cosmos Snow Sonata (*Cosmos bipinnatus*)

ANNUAL

Summer/fall bloom
Frost tender

TO PLANT OUTDOORS

Sow seeds 1/2 inch deep, 1 to 2 inches apart in a sunny location in well-worked garden soil once danger of frost is past. Cover lightly and keep seed bed moist. Seedlings emerge in 7 to 10 days. Keep well weeded and watered while plants are young; mature cosmos can handle hot and dry conditions.

TO START EARLY INDOORS

Sow seeds 1 inch apart in a container of seed starting mix, 4 to 6 weeks before last expected frost. Cover 1/2 inch deep, keep moist and provide a good light source. Plant outdoors once weather warms up after

gradually acclimating to outdoor conditions.

THIN OR TRANSPLANT

Space 6 inches apart when seedlings are large enough to handle.

GROWING NOTES

These free flowering summer bloomers produce reliably in all soil types and can be sown several times through early July for a succession of flowers. Cutting generous bouquets actually prolongs the blooming season. Replant a spent spring flower bed with satiny Snow Sonata, deep indigo Royal Ensign bush morning glories and sparkling Signet Marigolds for a summer showing to shine until frost.

MATURE HEIGHT	2 feet
DAYS TO GERMINATE	7 - 10 days
SPACE SEEDS	1 - 2 inches
PLANTING DEPTH	1/2 inch
SUN/SHADE	Full sun
PLANT IN	April - July

Watermelon Allsweet
Sandia Allsweet

E Large, oblong 25-30 lb. striped melons grow to 17-19" long and 7" in diameter. Deliciously sweet, bright red flesh. Resistant to fusarium wilt and anthracnose.

F SOW in thoroughly warmed soil in full sun in spring after all danger of frost. Sow 4-6 seeds about 3" apart in hills 5-7' apart. Cover with 1" of fine soil; firm lightly and keep evenly moist. Seedlings emerge in 7-10 days.

G

Full Sun	1 in.	2-3 plants/group	90-104 days
			
Pleno Sol	2,5 cm	2-3 plantas por grupo	90-104 días

Frutos rayados, grandes, alargados, de 11-13,5 kg, que crecen hasta 43-48 cm de largo y 18 cm de diámetro. Pulpa deliciosamente dulce y de color rojo brillante. Resistente a la putrefacción por fusarium y antracnosis. SEMBRAR en tierra completamente cálida a pleno sol, en primavera, después de que pase todo peligro de helada. Sembrar 4-6 semillas a una distancia aproximada de 7,5 cm entre sí, en montículos separados por 1,50-2,00 m. Cubrir con 2,5 cm de tierra de buena calidad; apisonar suavemente y mantener la humedad en forma pareja. Las plántulas aparecen a los 7-10 días.

CERTIFIED ORGANIC BY OREGON TILTH

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A DILL
Long Island Mammoth

Online Code 7301

Versatile, traditional herb. Seeds and leaves prized for pungent aroma. A favorite flavoring for pickles and kraut.

D	E	F	G	I
Days to Germinate	Depth to Sow	Seed Spacing	Row Spacing	Days to Harvest
7-21	1/16 in	1 in	2 ft	65-70

C Sow in average soil, after danger of spring frost. Sow seed indoors 6-8 weeks before outdoor planting time for earliest harvest.

H Thin seedlings when they are 2-3 inches in height, with the final spacing of the plants 8 inches apart.

K Garden Hint: Should be harvested while flower heads are still abundant and green. Cut entire plant and dry, contained upside down in a paper bag.

B

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Seeding and Transplanting

- Easily transplanted
- Seed germinated in a baking pan, plastic tray, pot or cardboard milk carton
- Peat pellets or peat pots
- Transplant seedlings when they develop their first two to three true leaves



Light

- Most need full sun
- Leafy crops can tolerate shade
- Fruit bearing need the most sun of all





WATERING

Watering

- Drainage
- Overwater → Symptoms
- Avoid wetting the foliage
- Mulch
 - Compost
 - Straw



ORGANIC MATTER BENEFITS

- **Adding organic matter improves nutrient supply of the soil**
- **Increases soil biological activities**
- **Improves soil structure**
- **Improves soil water holding capacity**
- **Prevents soil erosion**

Increase your Success



- Mulch

- Helps reduce soil moisture loss through evaporation
- Helps control weed germination and growth
- Insulates soil, protecting roots from extreme summer and winter temperatures
- Can improve soil biology, aeration, structure (aggregation of soil particles), and drainage over time
- Can improve soil fertility as certain mulch types decompose
- Gives planting beds a uniform, well-cared-for look



DISORDERS, DISEASES AND INSECTS

Disorders, Diseases and Insects

Check plants periodically

- Mechanical damage
- Salt and/or Fertilizer burn
- Insects



“If a little is great, and a lot is better, then way too much is just about right!”

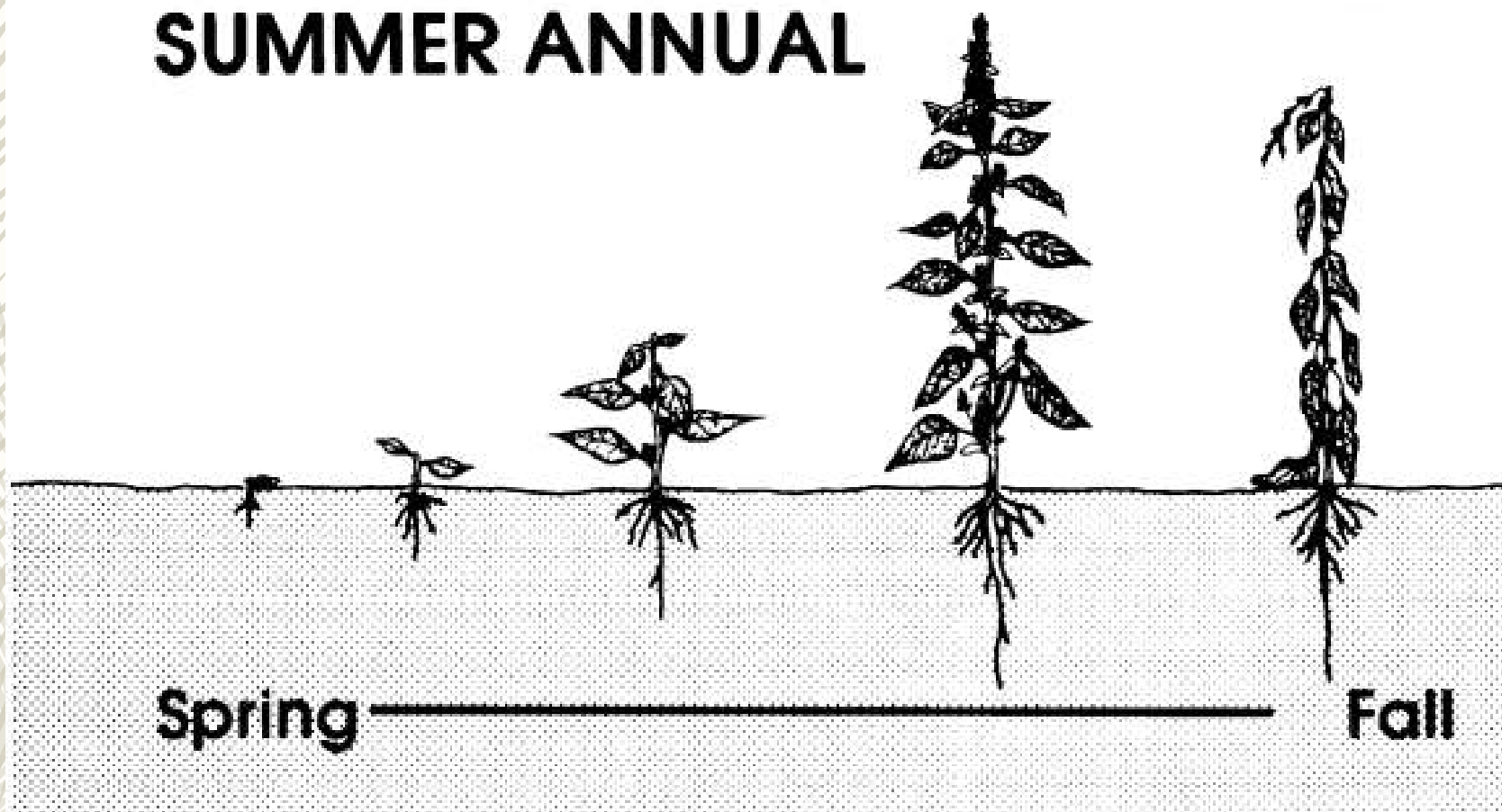


— Mae West.

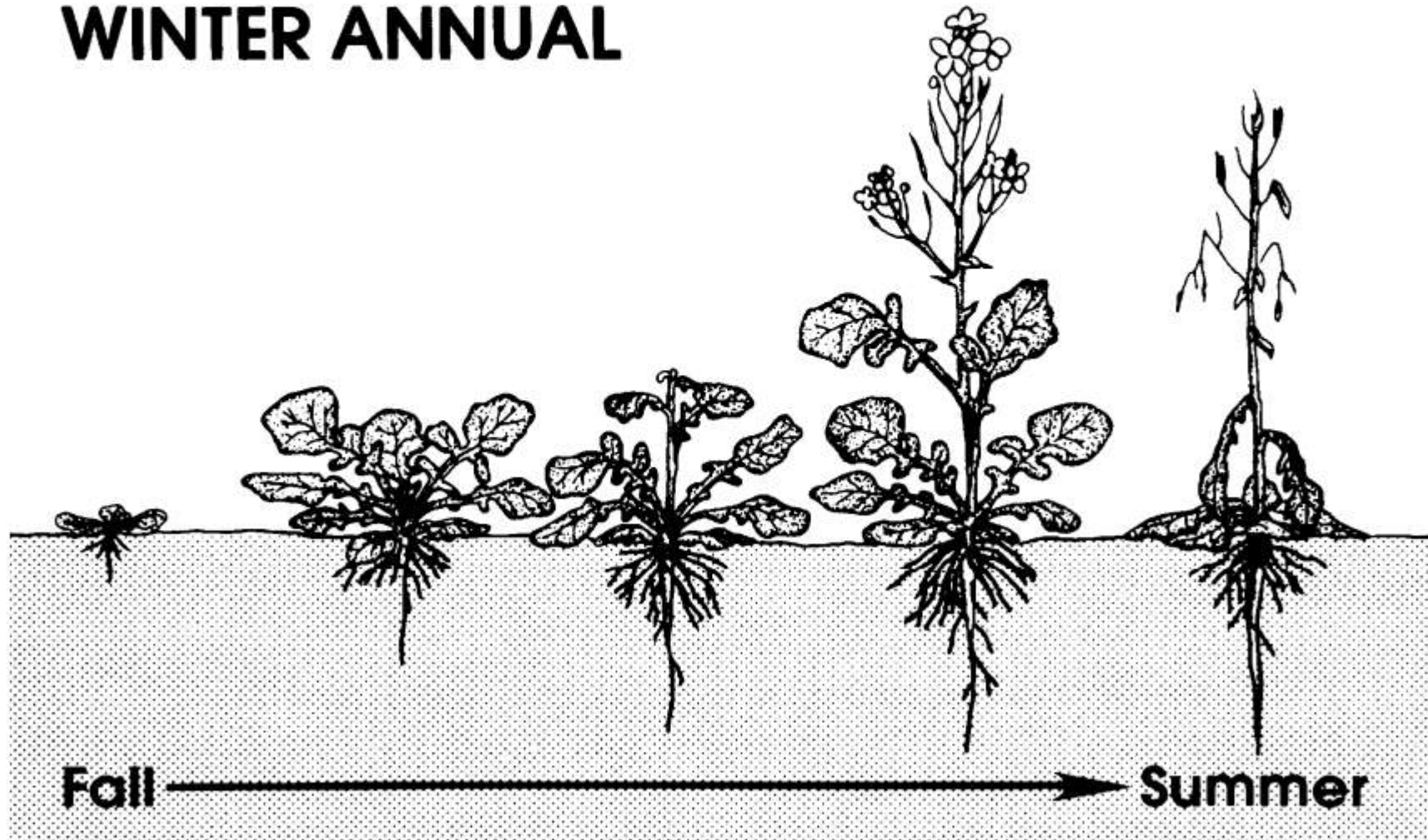


CONTROLLING WEEDS

SUMMER ANNUAL



WINTER ANNUAL



LESLIE BECK, NMSU EXTENSION WEED SPECIALIST

Controlling weeds

- Proper identification
- No magic answer
- One approach won't be enough
 - Give competition
 - Hands-on Technique





Resources

- Bernalillo County Extension Office
- <https://bernalilloextension.nmsu.edu/>

Desert Blooms

<https://desertblooms.nmsu.edu/>