



Companion Planting

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A Tale of Two Gardens



Companion Planting

- Having a diverse group of plants side by side mimics a natural ecosystem
- Research in area is anecdotal
 - Some scientific studies
 - Combine folklore and fact
 - Experiment to see what works for you!

Companion Planting

- Companion planting focuses on how certain plants interact with one another
 - Attractants
 - Trap crops
 - Repellents
 - Good neighbors
 - Antagonists
- Mostly insect interactions, some disease



Attractant

- Certain plants attract beneficial insects to the area
 - Pollinators
 - Predator/prey
 - Shelter for insects
- Example
 - Many beneficial insects are very small and can not reach food in large blossoms
 - Plants that have a small flower may attract these insects
 - Dill, carrot, yarrow, Queen Anne's lace



Trap Crop

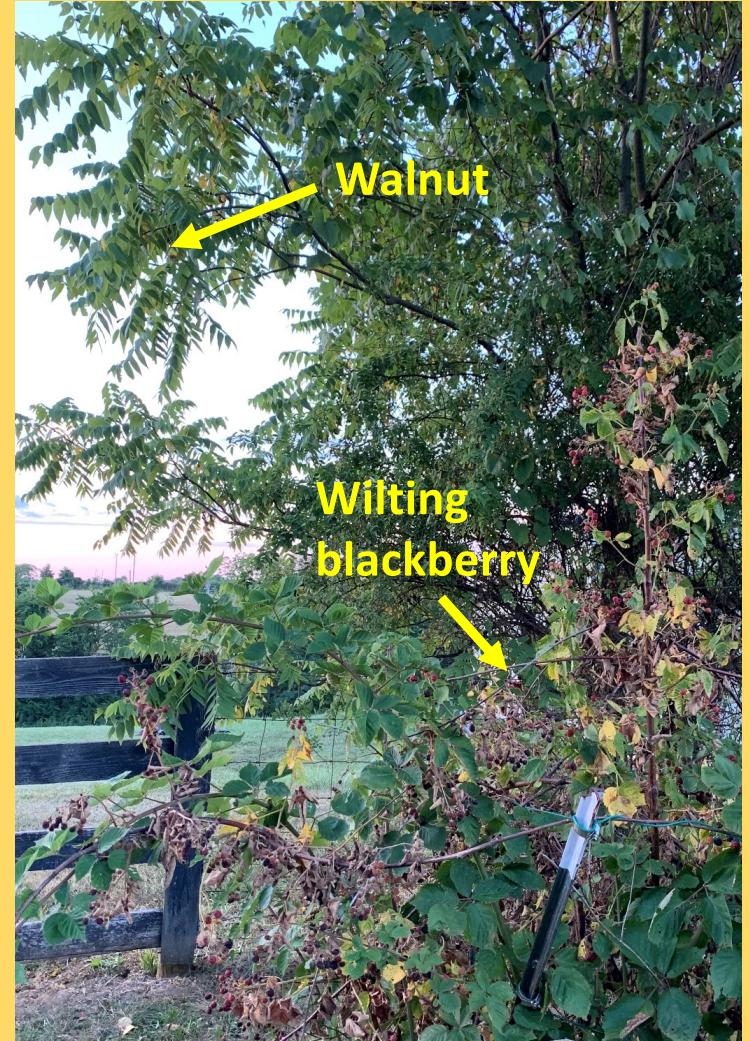
- Insects like some plants more than others
- Planting these favorites can cause a diversion by attracting pests and causing them to leave your crops alone
- Example
 - Blue Hubbard squash is more attractive to some insects than other types of squash
 - Planting Blue Hubbard squash away from your other squash plants may divert pests from your crop



Blue Hubbard Squash
Photo from bonnieplants.com

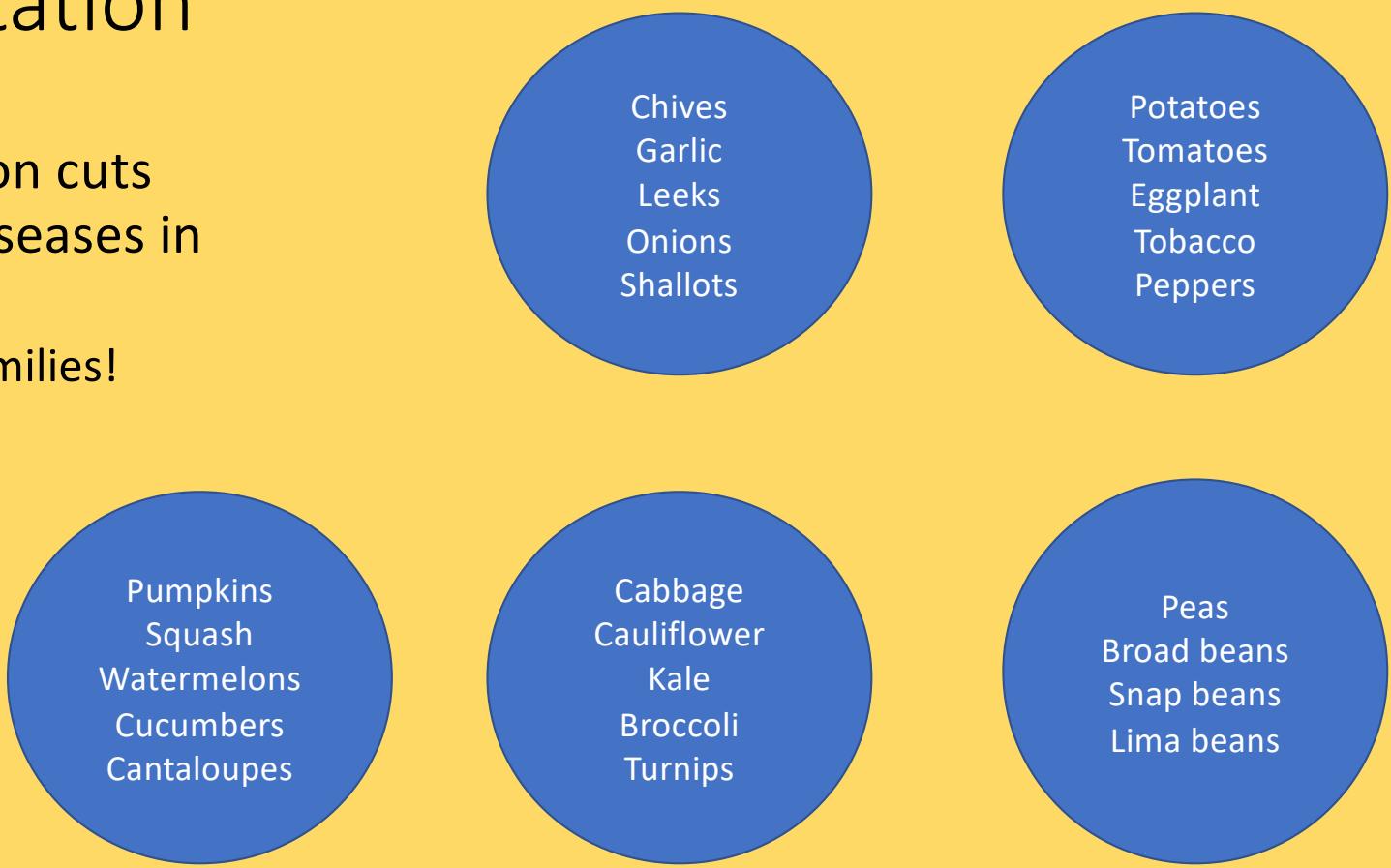
Antagonists

- Some plants naturally emit a chemical that has a negative impact on plants growing nearby
- Example
 - Walnuts emit a chemical called juglone which can cause wilting in some plants



Crop Rotation

- Crop rotation cuts down on diseases in the garden
 - Rotate families!



Chives
Garlic
Leeks
Onions
Shallots

Potatoes
Tomatoes
Eggplant
Tobacco
Peppers

Pumpkins
Squash
Watermelons
Cucumbers
Cantaloupes

Cabbage
Cauliflower
Kale
Broccoli
Turnips

Peas
Broad beans
Snap beans
Lima beans

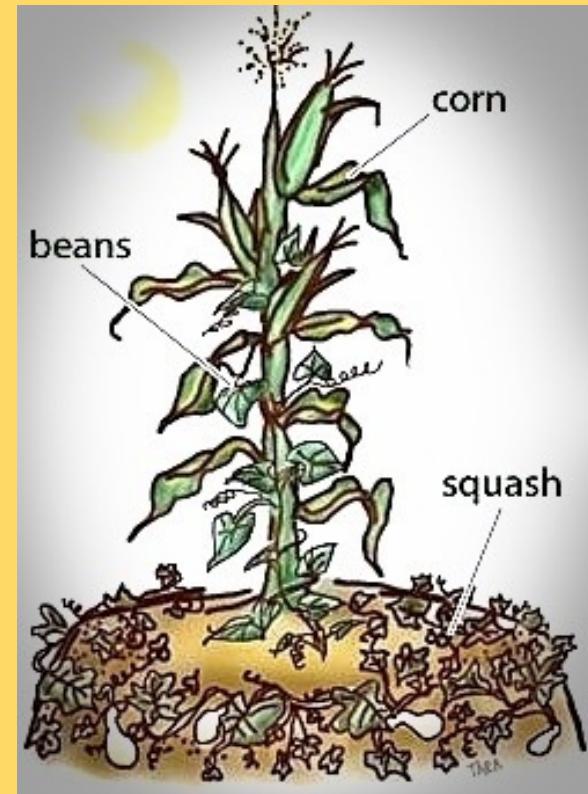
Repellent Crops

- Some plants have a strong smell which discourages pests
 - Causes confusion?
- Example
 - Mints planted next to cabbage have been shown to repel aphids and other pests
 - Radishes repel cucumber beetles
 - Marigolds are a general repellent



Good Neighbors

- Plants support one another in growth
- Example
 - Planting corn, beans and squash together
 - Corn provides trellis, bean gives nitrogen to corn and squash shades soil to keep out weeds
 - Often called “three sisters”



<http://www.ucanr.org/blogs/blogcore/postdetail.cfm?postnum=25836>

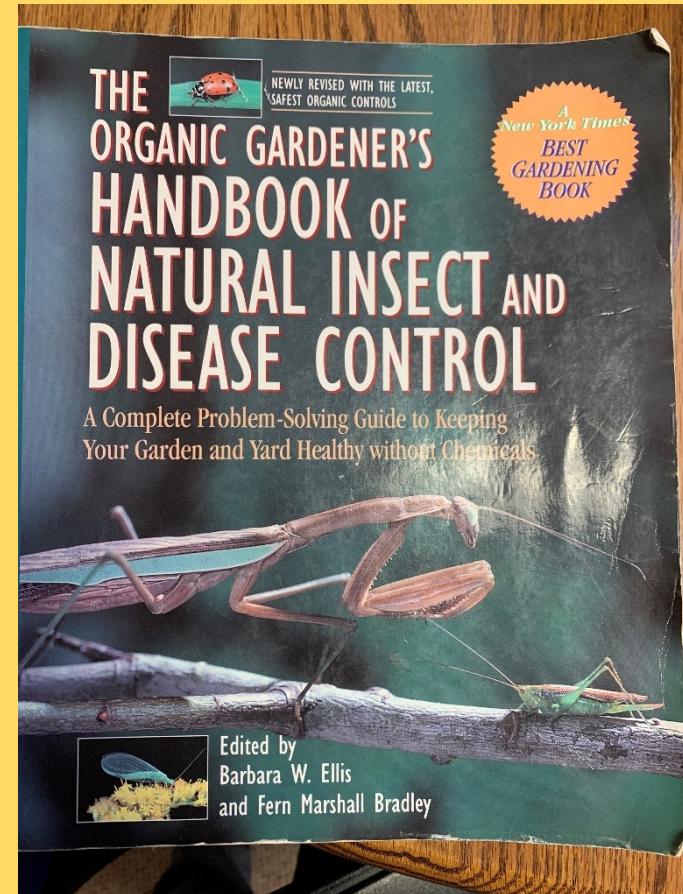
Final Thoughts

- Experiment!
- Plant things you like. Even if they don't have an interaction, you still have things you like!
- An added benefit of companion planting is combining beauty with purpose
- Look at your garden as an ecosystem
- No one plant is best against everything



Sources

- The Organic Gardener's Handbook of Natural Insect and Disease Control by Rodale
- All New Encyclopedia of Organic Gardening by Rodale
- Great Garden Companions by Rodale



Sources

- Specific Examples and Interactions

- Companion Planting

<http://chemung.cce.cornell.edu/resources/companion-planting>

- Benefits of companion planting in gardening

<http://www.agriculture.vsu.edu/files/docs/cooperative-extension/companion-planting-in-gardening.pdf>

- Vendors of Beneficial Insects

- <https://entomology.ca.uky.edu/ef125>