

Veggie Companion Planting: Soil Sidekicks

Relationships are the glue that holds a society together. People are social animals and therefore rely on each other for all manner of things...but have you ever thought of your plants in the same way? Is it possible that plants may grow happier with the right soil sidekick?

Why Diversify?

According to Cornell University's Extension Office, the research on intercropping, or companion planting, is anecdotal in nature, deriving less from duplicatable scientific examination and more from organic field accounts and personal observation and study. However, it is agreed that opting for a more diverse planting delivers a greater variety of colors, smells and fruiting events - to frustrate even the savviest of pests hoping for an easy monocultural bounty. Additionally, soil fertility is better maintained when nutrients are not taxed and depleted by a single plant variety.

What Soil Mates Do

Health and Growth Support

Consider first the general growing requirements of your crops. Are they alike or compatible? For instance, take the "Three Sisters" planting concept. Planted all three together, sweet corn, squash and beans make a supportive trio. Beans fix replenish the nitrogen corn depletes from the soil, corn provides support for the vines of both beans and squash...and the leaf density of the three planted together prevents weed growth. And this isn't the only example. Study the needs of each crop; you may be surprised to find others to live in the same space symbiotically.

Beneficial Insect Attractants and Trap Plants

Using a biological control like intercropping is a powerful landscape management practice. Designate a special area to put "trap plants"; varieties that attract pests and keep them away from your crop. Interplant nectar-producing varieties (like Gaillardia or Yarrow) with different flowering times to attract beneficial predatory insects and provide life-cycle support. The nectar will feed the adult beneficials, while the larvae feast on the pests. They grow to adulthood and the cycle begins again!

Pest Repellants

Think about your crop and what you'd like to repel. Cucumber beetles? Raccoons? Ants? Spider mites? Here are some suggestions:

- Raccoons are not cuke fans but they love corn, so try to plant cukes near your corn. And ants don't like cukes either.
- Nasturtiums repel squash bugs. Icicle radishes, when planted on the squash mound and allowed to go to seed, are also squash bug repellants.
- Onion family (ornamentals, garlic) varieties are said to protect against red spider mites, so plant them in between your tomatoes.
- Plant tomatoes in between roses for black spot protection.

- Onion maggots treat a row like a buffet. How to foil those little critters? Make it harder for them and scatter your plantings.

Help vs. Harm?

Some plants aren't meant to be together, and may even release chemical compounds that may inhibit the growth of others. An example of this "antagonism" is the black walnut; its roots release a chemical called juglans that is known to be toxic to plants in the nightshade family (tomato, pepper and eggplant). Cucumbers and potatoes are antagonistic, as well as onion family varieties and beans. We'd love them to get along at the garden party, but they're just plain incompatible!

In a nutshell, plants are people, too...some get along, some don't. Get personal with your plants...get to know them well, because your garden is like a social experiment. It's a testing ground; every square inch of every microclimate can yield a different result. Although there is no magic bullet, no one prescription to treat every ailment, there is joy in trial and error. Try these combinations, journal your successes and failures, and see if any of these soil sidekick suggestions work well for you!

Fact Sheets

[HLA-6447: Conservation Biological Control for the Home Landscape](#)

[Cornell University Cooperative Extension: Companion Planting](#)

[Earth-Kind Gardening Series: Cultural Control Practices](#)