

Companion Planting for Pest Control

Learn to recognize that not all insects are bad, only 10% of insects are “bad”. The remaining 90% are either beneficial or benign

1. Bad Bug vs Good Bug
 - a. Bad Bug – bugs that are eating your plants
 - b. Good Bugs – these insects serve to prey or parasitize some of our most tenacious pests (most famous is the ladybug)
2. Have a Pest Management Strategy
 - a. Diversity
 - b. Utilize preventative measures
 - c. Employ live biological controls (attract beneficials)
 - d. Properly identifying the pest and the plant host
 - e. Turn to organic product controls only when necessary

What is Companion Planting?

Companion planting is based on the idea that certain plants can benefit others when planted in near proximity to those having complementary physical demands.

Some companions hide, repel, and trap pests. Others provide food and shelter to attract and promote beneficial insects.

The Goal is to create a thriving mini-ecosystem that has beneficial interrelationships

Creating Diversity

Monocultures: In contrast to natural systems, like forests and prairies, our gardens tend to contain neat identical plantings of just a few different species. These monocultures are prime targets for insects and disease. Diversity in the garden avoids monoculture and minimizes pest and disease problems.

How to Add Diversity:

1. Rotate cultivars each year or try different varieties
2. Try open-pollinated seeds instead of hybrids. The plants from open-pollinated seeds are all just a little different genetically, so even if pests or disease attack some of the plants, the rest of the crop maybe spared.
3. Add flowering plants and herbs. Flowers provide a source of food and shelter for spiders and other beneficial insects that eat or parasitize plant pests
 - a. Repelling Pests
 - b. Luring Pests from Crops
 - c. Sheltering Beneficial Insects

a. Repelling Pests:

1. Use the natural abilities of the plant to attract, confuse, or deter insects. Plant pungent plants as an edging around your beds or mix them in amongst your vegetable plants
 - a. Some plants produce repellent or toxic compounds that chase pests away or stop them from feeding
 - b. In other cases, the aromatic compounds released by plants can mask the scent of companion crops, hiding your vegetables.

b. Luring Pests from Crops

1. Some plants have an irresistible appeal for certain pests. Nasturtiums are irresistible to aphids for example.

a. Attractant plants can act as decoys

b. They make it easier to control insects since the insects are concentrated on one plant. Once insects are “trapped” you can pull out the attractant plant and cover with plastic and dispose of it.

c. Sheltering Beneficial Insects

1. Not all insects are enemies. Many actually help your garden grow by eating or parasitizing plant pests.

2. Encourage beneficial insects by making your garden attractive to them.

a. Provide food (flowering plants) i.e. dill, yarrow, fennel, goldenrod

b. Provide water (small bowl, pie plate)

c. Provide shelter (rocks, wood chips, etc)

Garden Design

1. Keep family members separate

a. Bean Family—beans, peas, peanuts

Carrot Family—carrots, dill, fennel, celery, parsley, cilantro

Cabbage Family—cabbage, brussel sprouts, bok choy, cauliflower, kohlrabi, broccoli, collards, turnips, radishes, kale

Corn Family—corn, wheat, oats, rice, other cereal grains

Daisy Family—lettuce, artichoke, sunflowers, daisy, asters, marigold

Goosefoot Family—spinach, beets, chard

Gourd Family—squashes, melons, cucumbers

Lily Family—asparagus, onion, shallots, garlic, chives

Mint Family—oregano, mint, basil, rosemary, sage, lavender, thyme

Nightshades Family—tomato, petunia, potato, peppers

Rose Family—roses, strawberries, blackberries, apples, pear, raspberries

Resources

<http://attra.ncat.org/attra-pub/complant.html>

http://www.seedsofchange.com/enewsletter/issue_55/companion_planting.aspx

<http://www.extremelygreen.com/>

Book “Carrots Love Tomatoes” by Louise Riotte