

The Three Sisters and Companion Planting

Companion planting involves selecting plants and planting rotations that will support each other, protect each other and combine foods that make up complete proteins and meal diversity for best nutrition. The Three Sisters planting comes to us from Native American folklore surrounding the introduction of Corn, Bean and Squash, not only to support and protect each other as they grew, but also to provide three important nutrition staples. Essentially the corn is planted first creating shade and protection for the climbing beans that will eventually use the corn stalk as a bean pole. The broad squash leaves and vines wind between the corn and beans creating a cooling ground cover to keep the soil from drying out in the late summer months (see article below). For vegetarians and those looking for complete plant-based proteins it is necessary to combine whole grains and legumes (bean, peas and lentils); so peanut butter by itself is not complete until it is spread on whole grain bread, beans are not complete until wrapped in a whole grain tortilla.

Check out these websites and a few of your own research and try some companion planting in your garden this year.

<https://medium.com/nannie-appleseed/ancient-companion-planting-the-three-sisters-e1d3b5f34285>

<https://theprepperjournal.com/2018/07/10/companion-planting-planting-modifying-the-three-sisters/>

<https://www.thespruce.com/companion-planting-with-chart-5025124>

<https://ancientnutrition.com/blogs/all/food-combining>

<https://beyondhealth.com/content/PDF/food-Combining-chart.pdf>

Another aspect of companion planting is to place plant the predators dislike near those plants which are more desirable and vulnerable. while this is not fool proof some of these folk-lore suggestions actually work along side with good fencing and spacing plants apart to avoid insect infestations. There are many 'natural' insecticides include soapy water spray to avoid harsh chemicals which can be unsafe for your family, pets and wildlife.

ARTEMISIA - This plant produces a strong antiseptic, although not unpleasant aroma that repels most insects. Planted as a border, it can also deter small animals like Rabbits and moles.

BASIL -The oils in Basil are said to repel thrips, flies and mosquitoes. I plant basil alongside my tomatoes for larger, tastier tomatoes.

BEE BALM- I love this plant because it attracts bees to my garden. It is another plant that you can grow with your Tomatoes.

BORAGE - This plant is a real gem in the garden. It repels Tomato horn worms and cabbage worms and attracts beneficial bees and wasps. Borage also adds trace elements to the soil.

CATNIP - This plant repels just about everything. You can use it to keep away flea beetles, aphids, Japanese beetles, squash bugs, ants, and weevils.

CHIVES - Chives are one of my favorite herbs. You can plant Chives to repel Japanese beetles and carrot rust flies. It has also been said that Chives will help prevent scab when planted among apple trees.

CHRYSANTHEMUMS - When I do use an insecticide I use one made from chrysanthemums called pyrethrum. This all-natural pesticide can help control things like roaches, ticks, silverfish, lice, fleas, bedbugs, and I like to use it to control ants in certain parts of the garden. In the garden white flowering chrysanthemums are said to drive away Japanese beetles and *C. coccineum*, commonly known as Painted Daisy, kills root nematodes.

DAHLIAS - Dahlias repel nematodes and the blooms are great for adding some color to flower borders and fresh arrangements.

DILL - There is always a place for this plant in my garden. Dill is best planted with Cucumbers and Onions varieties. During the cool season It can also be planted with Lettuce. Dill attracts hoverflies and predatory wasps, and its foliage is used as food by swallowtail butterfly caterpillars. Tomato horn worms are also attracted to Dill, so if you plant it at a distance, you can help draw these destructive insects away from your Tomatoes. Dill repels aphids and spider mites. Sprinkling Dill leaves on squash plants will also repel squash bugs.

GARLIC - In addition to its great taste and health benefits, Garlic planted near roses repels aphids. It also deters codling moths, Japanese beetles, root maggots, snails, and carrot root fly. When planted alongside Onions, they also deter moles and mice.

HYSSOP - This is another one of my favorite plants. Hyssop is great for attracting honeybees to the garden.

LAVENDER - Lavender is a favorite among many beneficial insects and also repels fleas and moths.

MARIGOLDS - The Marigold is probably the most well-known plant for repelling insects. French marigolds repel whiteflies and kill bad nematodes. Mexican marigolds are said to offend a host of destructive insects and wild rabbits as well. If you choose marigolds for your garden they must be scented to work as a repellent. And while this plant drives away many bad bugs, it also attracts spider mites and snails--which are good.

NASTURTIUMS- I plant Nasturtiums with my Tomatoes and Cucumbers as a way to fight off woolly aphids, white flies, Squash bugs, and Cucumber beetles. The flowers, especially the yellow blooming varieties, act as a trap for aphids.

PETUNIAS - They are great to look at, and repel Asparagus beetles, leaf hoppers, a range of aphids, Tomato worms, and a good many other pests.

ROSEMARY-Deters Cabbage moth, Bean beetles and the Carrot fly

SUNFLOWERS - I use Sunflowers as a way to draw aphids away from my other plants. Ants move their colonies onto Sunflowers. The Sunflowers are tough enough that they suffer no damage.

THYME-Deters Cabbage worm

<https://agresearch.montana.edu/wtarc/producerinfo/entomology-insect-ecology/Biopesticides/NaturalInsecticides.pdf>

<https://smithspestmanagement.com/blog/post/natural-insecticides/>

<https://drecampbell.com/natural-homemade-insecticides/>