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Companion Planting

Plants, like people, influence one another. Some get along better together than others. Black walnut and butternut have an antagonistic relationship with tomatoes, for example. The toxin juglans exuded from the trees' roots is quite toxic to several plants, including those of the nightshade family such as tomato, pepper, and eggplant. Plant neighbor relationships might take several forms. First, they may improve the health or flavor of a companion. Second, they may interfere with the growth of a neighbor. Third, they may repel or trap an undesirable critter. Companion plant may also attract a beneficial insect.

Although there are several references about beneficial relationships between plants, the science of companion planting is often anecdotal. There appears to be no research proven reproducible companion planting recommendations. There are numerous suggestions rooted in organic agriculture. The suggestions below are a starting point for individual trials. Localized growing environment influence success or failure. Certainly, a mixed plant community rather than a monoculture is a model for companion planting. The array of colors, aromas and ripening times often confuse plant pests in these situations. The following are a few plants that seem to help one another. The garden should test and trial. Continue doing what works and abandon what does not.

Asparagus – A good method for planting is in a long row at one side of the garden. After harvest, plant tomatoes on either side, and both plants reap benefits from each other. Parsley planted with asparagus seems to provide vigor to both.

Beans – Generally, beans thrive when interplanted with carrots, cauliflower and beets. They also aid cucumbers and cabbage. A Summer Savory companion improves growth and flavor as well as repelling bean beetles. As a bonus, cook both together for a great flavor. Beans don't like members of the onion family and they dislike being planted near gladiolas.

Beets – Beets grow well near bush beans, onions, and kohlrabi, but dislike *pole* beans. In addition, lettuce and brassicas are good companions.

Cabbage – Cole crops such as cabbage, kale, kohlrabi, broccoli, and Brussels sprouts as well as collards, rutabagas and turnips. They do well when planted with aromatic plants such as dill, celery, chamomile, sage, peppermint, and rosemary. Do not plant with tomatoes, pole beans or strawberries.

Carrots – Onions, leeks and herbs such as rosemary, wormwood, and sage act as repellents to the carrot fly.

Corn – Sweet corn does well with potatoes, peas, beans, cucumbers, pumpkin, and squash. Melons, squash, pumpkin and cukes like the shade provided by corn.

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Cucumbers – Cukes seem to be offensive to raccoons, so it's good to plant them near your corn. Thin strips of cucumbers also repel ants. Sow 2 or 3 radish seeds in cucumber hills to repel cucumber beetles. Don't pull the radishes even if they go to seed. Cukes and potatoes are antagonistic. Cukes do not grow well with aromatic herbs.

Lettuce – Lettuce grows well with strawberries, cucumbers and carrots. Radishes grown with lettuce are especially good.

Onion – Onions and all members of the cabbage family get along well together. They also like beets, strawberries, tomatoes, lettuce, summer savory and a sparse planting of chamomile. They do not like peas and beans. Ornamental relatives of the onion are helpful as protective companions for roses. Since onion maggots travel from plant to plant when set in a row, scatter your onion plants throughout the garden.

Sweet Pepper – Basil and sweet peppers have similar general requirements. They work well when planted together.

Squash – As with cucumbers, 2 or 3 icicle radishes planted in each hill help prevent insects on squash. Again, let them grow and go to seed. Nasturtiums repel squash bugs. Also, squash planted either earlier or later than usual will often remain insect free.

Tomato – Tomatoes and all Cole crops should be kept apart. Tomatoes also dislike potatoes and fennel. Tomatoes are compatible with chives, onion, parsley, marigold, nasturtium and carrot. Garlic planted between tomato plants protects them from red spider mites. Tomatoes protect roses against blackspot. **A spray for roses:** make a solution of tomato leaves in your blender by adding 4 or 5 parts of water and 1 tablespoon of cornstarch. Strain and spray on roses where it is not convenient to plant tomatoes as companions.

The best way to see how companions interact with each other is first follow the given guidelines. Secondly, and most importantly, keep careful records of your successes and failures. Learn the basic combinations and then experiment with your own. Just as every person is different, no two gardens are alike. That is why personal observation is so important.

Resources: *Carrots Love Tomatoes*, by Louise Riotte; several books from Rodale Press.

Pests and the Plants that Repel Them

Certain plants are believed to repel insects.
Use the list below to help you map out your next planting arrangement.

Pest	Repellent Plant(s)
Ant	Mints, tansy, wormwood
Aphid	Most aromatic herbs, including catnip, chives, clover, coriander, eucalyptus, fennel, garlic, larkspur, marigold, mustard, nasturtium, peppermint, spearmint
Asparagus beetle	Basil, calendula, nasturtium, parsley, tansy, tomato
Cabbage butterfly	Southernwood, tansy
Cabbage Looper	Catnip, dill, eucalyptus, garlic, hyssop, nasturtium, onion, pennyroyal, peppermint, rosemary, sage, southernwood, spearmint, thyme, wormwood
Cabbage maggot	Garlic, marigold, radish, sage, tansy, thyme, wormwood
Carrot fly	Basil, leek, lettuce, nasturtium, onion, rosemary, sage, tansy, tobacco, wormwood
Codling moth	Garlic, wormwood
Colorado potato beetle	Catnip, coriander, eucalyptus, marigold, nasturtium, onion, tansy
Corn earworm	Cosmos, geranium, marigold, thyme
Cucumber beetle	Catnip, corn, marigold, nasturtium, radish, rue, tansy
Cutworm	Spiny amaranth, tansy
Flea beetle	Catnip, marigold, nasturtium, peppermint, rue, spearmint, southernwood, tansy, tobacco, wormwood
Flies	Basil, tansy
Imported Cabbageworm	Dill, garlic, geranium, hyssop, peppermint, nasturtium, onion, pennyroyal, sage, southernwood, tansy, thyme, borage
Japanese beetle	Catnip, chives, garlic, nasturtium, odorless marigold, tansy, white geranium
Leafhopper	Geranium, petunia
Mexican bean beetle	Garlic, marigold, nasturtium, rosemary, savories
Mouse	Wormwood
Mole	Castor bean, narcissus
Mosquito	Basil
Nematodes	Calendula, French marigold
Peach borer	Garlic
Pests in general	Oregano
Rabbit	Garlic, marigold, onion
Slug and snail	Fennel, garlic, rosemary
Spider mite	Coriander, dill
Squash bug	Catnip, marigold, nasturtium, peppermint, petunia, radish, spearmint, tansy
Squash vine borer	Radish
Tomato Hornworm	Borage, calendula, dill, opal basil, thyme
Whitefly	Basil, nasturtium, peppermint, thyme, wormwood
Wireworm	Clover

Plants Helping Other Plants

Listed below are a few of the plant combinations that gardeners have long recommended. None has been scientifically proven, but some do seem to make good common sense as interplants. Test them yourself.

Plant	Plant(s) It Enhances
Anise	Coriander
Basil	Pepper, tomato
Bee balm	Tomato
Borage	Bean, strawberry, tomato, squash
Chamomile	Cabbage family, cucumber, most herbs, melon, onion
Chervil	Radish
Chives	Carrot, grape, rose, tomato
Coriander	Anise
Dandelion	Fruit trees
Dead nettle	Potato
Dill	Cabbage family, lettuce, onion
Dill, <i>Immature</i>	Tomato
Garlic	Rose, beet, cabbage family
Horseradish	Potato
Hyssop	Cabbage, grape
Larkspur	Bean, cabbage
Lovage	Bean
Marigold	Potato, rose, tomato
Mint	Cabbage, pea, tomato
Mustards	Bean, fruit trees, grape
Nasturtium	Cucumber, radish
Onion	Beet, cabbage, lettuce, strawberry
Oregano	Pumpkin
Pigweed	Corn, melon
Rosemary	Bean
Rue	Fig
Sage	Cabbage, carrot, strawberry, tomato, marjoram
Savories	Bean, onion
Summer savory	Melon
Sow thistle	Melon
Tansy	Blackberry, raspberry, rose
Tarragon	Most vegetables
Thyme	Eggplant, potato, strawberry, tomato
Yarrow	Most aromatic herbs

Plants Harming Other Plants

These are the herbs that gardeners have suggested as “harmful” to certain neighboring plants. Don’t let this scare you. Any plant deserves to remain innocent until proven guilty. So far, there’s almost no scientific “proof” to back up most of these claims. The only plant that should perhaps concern the gardener is wormwood, which does contain some toxins.

Plant	Crop(s) It Harms
Anise	Carrot
Aster	Sugar maple, red pine, tulip poplar, black cherry
Balsam poplar	Green alder
Beets	Pole bean
Black cherry	Red pine, red maple
Black walnut	Pine (Austrian, red, Scotch, white); apple, white birch
Cabbage	Strawberry
Chives	Bean, pea
Chrysanthemum	Lettuce
Coriander	Fennel
Dill	Carrot, tomato
Fennel	Bean, pepper
Foxtail & Smooth broome	<i>Populus</i> sp.
Garlic	Bean, pea
Golden rod	Sugar maple, red pine, tulip poplar, black cherry
Hyssop	Radish
Kentucky bluegrass	Azalea, barberry, <i>Taxus</i> , forsythia, <i>Cornus</i> sp.
Kohlrabi	Tomato
Larkspur	Beet
Mustard	Turnip
Onion	Bean, pea, sage
Perennial rye	Apple, forsythia, <i>Cornus</i> sp.
Pole bean	Beets
Potato	Pumpkin, squash, turnip
Red fescue	Azalea, barberry, <i>Taxus</i> , forsythia, <i>Cornus</i> sp.
Rhododendron	Douglas fir
Rue	Basil, cabbage, sage
Sage	Onion
Sassafras	Box elder, elm, silver maple
Shallot	Bean
Southern red oak	Sweetgum
Sugar maple	Yellow birch, white spruce
Sumac	Douglas fir
Sycamore maple	Yellow birch
Tall fescue	Black walnut, sweetgum, white ash
Tansy	Collard
Tomato	Kohlrabi
Wormwood	Most vegetables