PROBLEM SOLVERS

Michigan State University Extension Oakland County

COMPANION PLANTING

Through the years gardeners have observed that some plants grow well together, while others do not. This list presents traditional companions (plants that have compatible growth habits and share space well), allies (plants that enhance growth and ward off insects), and enemies (plants that deter good growth). As you plan the garden, try some of the beneficial pairings and see if they bring you good results.

NOTE: The following statements are <u>suggestions</u> not recommendations.

Allium (family of onions, garlic, leek)

Repel mice, Japanese beetles, aphids, and peach borers. Some examples to protect are: cabbage, raspberries, grapevines and roses. Garlic also deters some blights.

Anise (Pimpinella anisum)

The small repels aphids and fleas. Do not plant near carrots. Encourages coriander to germinate better and grow more vigorously.

Angelica (Angelica archangelica)

Attracts aphids, parasitic wasps, lady beetles, lacewings and other beneficials. Plant angelica to shade low ground plants. Do not plant near carrots.

Artemisia

Repels most insects and is a good garden guard.

Asparagus

Asparagus likes basil, parsley and tomatoes; but dislikes onions. Pot marigolds deter beetles.

Asters

Repel most insects.

Basil, Sweet (Ocimum basilicum)

Plant near tomatoes to improve growth and flavor. Garden lore suggests that basil repels flies and mosquitoes, especially in picnic terrace areas. Do plant near rue.

Beans

Beans like almost all vegetables and herbs, but dislike onions, beets (except bush beans), garlic, gladioli, sunflowers and fennel. Green beans and strawberries love each other and both bear better together. Beans also love carrots, cauliflower, celery, chard, corn cucumbers, eggplants, peas, potatoes, radishes and strawberries when inter planted. Green beans and potatoes help each other by the potato repelling the Mexican bean beetle and the bean repelling the Colorado potato bug. Marigolds, nasturtiums, rosemary and summer savory also deter bean beetles, and improve growth and flavor.

Reebalm

Improves growth and flavor of tomatoes.

Beets

Beets like beans (except pole beans), cabbage, lettuce, garlic, onions and kohlrabi. Garlic improves growth and flavor.

Borage (Borago Officinalis)

Borage deters tomato worms and improves growth and flavor. Attracts honeybees and is believed to improve the flavor of strawberries. Strengthens the resistances of neighboring plants to disease and pests.

Cabbage Family (broccoli, brussel sprouts, cabbage, cauliflower, Chinese cabbage, kale and kohlrabi)
Cabbage like to be planted with any of the aromatic herbs and most vegetables. Chamomile and garlic improve growth and flavor. Catnip, hyssop, rosemary and sage deter cabbage moths. Dill improves growth and vigor. Mint deters cabbage moths and ants and improves vigor and flavor. Nasturtiums deter beetles and aphids. Southernwood deters cabbage moths and improves growth and flavor. Tansy deters cabbage worms and cutworms. They do not like tomatoes, pole beans, kohlrabi or strawberries. Late cabbage and early potatoes love each other. Broccoli loves peppermint.

Calendula (Calendula officinalis)

Repels dogs, tomato hornworm and asparagus beetles but is also considered a trap plant because it attracts aphids, whiteflies and other pests.

Caraway (Carum carvi)

Has a long taproot that helps loosen compacted soil and bring up nutrients from the subsoil. A good companion plant to peas. Caraway also attracts many beneficials with its lacy white heads of tiny flowers. Do not plant near fennel.

Carrots

Carrots dislike dill because it can retard growth. They get along with others like onions, chives, leaf lettuce, beans, peas, peppers, radishes, tomatoes and strong smelling herbs. Rosemary and sage deter carrot flies.

Castor Bean (mole plant)

Deter moles and mice.

Catnip (Nepeta cataria)

The scent seems to repel aphids, flea beetles, spittlebugs, ants, Japanese beetles and Colorado potato beetle and weevils. It's suggested to cut catnip branches and lay them throughout the garden to repel insects (however, some beneficials are also repelled).

Celery

Celery likes leeks, cabbage family, squash, tomatoes and beans (especially dwarf beans). Celery dislikes carrots and parsnips. Repels white cabbage butterfly.

Chamomile, Roman (Charmaemelum nobile)

Is said to improve growth and flavor of cabbages, onions and aromatic herbs.

Chard

Chard likes lettuce, peas, carrots and roses.

Chervil (Anthriscus cerefolium)

Their tiny white flowers attract many beneficial insects and when planted with radishes, it is said that they bring out the best in each other.

Chives (Allium schoenoprasum)

Recommended as companion plants for lettuce, grapes, carrots, tomatoes and roses. Do not plant near peas and beans.

Chrysanthemums

Deters most insects.

Coriander (*Coriandrum sativum*)

Repels aphids. Good host for beneficial wasps and helpful to anise. Do not plant next to fennel.

Corn

Corn is a good neighbor to almost anything. It loves potatoes, cucumbers melons, parsley, pumpkins and squash; beans and peas also help put back nitrogen into the soil that the corn uses. Odorless marigolds and white geraniums deter Japanese beetles; Pigweed raises nutrients from the subsoil to where the corn can reach them. Tomatoes and corn are attacked by the same worm.

Cucumbers

Cucumbers do not like aromatic herbs (sage) and despise potatoes. They like some shade so corn and sunflowers make them good neighbors. They also like beans, cabbage family, peas, radishes and tomatoes.

Daffodil Bulbs

Deter moles, mice, and chipmunks.

Dahlias

Deter nematodes.

Dead Nettle

Companion to potatoes; deters potato bug; improves growth and flavor.

Dill (Anethum graveolens)

Supports many beneficial insects and gardeners plant it near lettuce, onions and cole crops. Some say dill reduces carrot and tomato growth. Acts as a trap plant for tomato worm.

Eggplant

Eggplants like beans, peppers and potatoes. Marigolds deter nematodes. Eggplant deters the Colorado potato beetle.

Fennel (Foeniculum vulgare)

Plant away from gardens. Most plants dislike it. Attracts beneficial wasps and other beneficial insects with its small yellow flowers. Beans and tomatoes do not do well near fennel and wormwood is said to keep fennel seeds from germinating.

Flax

Deters the potato bug.

Garlic (Allium sativum)

Plant near roses and raspberries, deters Japanese beetles and aphids, improves growth and health. Is not recommended for planting near pears and beans.

Geranium

Deters most insects. The white one deters the Japanese beetle. Good among roses and grapes.

Grape Vines

Grape Vines like elm trees or mulberry. Hyssop helps give bigger yields.

Henbit

Is a general insect repellent.

Horseradish

Plant at corners of potato patch to deter potato bug.

Hyssop (Hyssopus officinalis)

Companion to cabbage and grapes. Keep away from radishes. Attracts beneficial insects and repels flea beetles, flies, cabbage moth and many insect larvae.

Kohlrabi

Kohlrabi loves beets and onions. They hurt tomatoes and dislike pole beans.

Lamb's Quarters

This edible weed should be allowed to grow in moderate amounts in the garden, especially in corn.

Larkspur

If enough eaten, kills Japanese beetles. Also causes digestive upset in humans.

Lavender

Repels moths and is a good garden guard.

Lettuce

Lettuce like beets, cabbage family, carrots, onions, radishes and strawberries. Chives and garlic deter aphids.

Lovage (Levisticum officinale)

Improves flavor and health of plants if planted here and there. Enhances the growth of both bush and pole type beans.

Marigold

Deter most insects. The workhorse of the pest deterrents. Plant thoughout the garden; it discourages Mexican bean beetles, nematodes and other insects. Examples of plants they protect are: potatoes, strawberries, roses, various bulbs, tomatoes and eggplants.

(Pot) Marigold (Calendula)

Companion to tomatoes, but plant elsewhere in garden, too. Deters asparagus beetle, tomato worm and general garden pests.

Marjoram

Plant here and there in garden to improve flavor.

Mint (Mentha spp.)

Companion to cabbage and tomatoes; improves health and flavor. Spearmint and peppermint repel ants, aphids, flea beetles and cabbage moths. In flower attracts many beneficial insects.

Mustard

Mustard takes harlequin bug from cabbage (then hand pick and kill).

Nasturtium (*Tropaeolum* spp.)

Companion to radishes, cabbage and cucurbits; plant under fruit trees. Deters aphids, squash bugs, whiteflies, striped cucumber beetles, striped pumpkin beetle, Mexican bean beetle and cabbage pests. It is good to use in vine crops. Is planted as a trap crop for aphids and for flea beetles on mint and oregano.

Onions

Onions detest peas and beans but like most others; although its neighbors have their own preferences. Chives help apple trees. Leeks like carrots, onions and celery.

Oregano (*Origanum* spp.)

Deters pests in general.

Parsley

Parsley likes roses, tomatoes, asparagus and corn.

Peas

Peas dislike onions, garlic and potatoes, otherwise are not fussy. They help spinach and are helped by carrots. They like corn, beans, radishes, potatoes, turnips and cucumbers. Chives deter aphids and mint improves vigor and flavor.

Peppermint

Planted among cabbages, it repels the white cabbage moth. When hung in dog kennels and doorways of homes, deters flies.

Peppers

Peppers like carrots, eggplants, onions and tomatoes.

Petunias

Protect beans and apple trees from ants and aphids.

Pigweed

One of the best weeds for pumping nutrients from the subsoil, it is especially beneficial to potatoes, onions and corn. Keep weeds thinned.

Potatoes

Potatoes are real fussy, they dislike pumpkins, squash and tomatoes and they do poorly around sunflowers and orach (relative to pigweed). They do like beans, corn, eggplants, peas and cabbage. Horseradish, planted at the corners of the potato patch, provides general protection; marigolds deter beetles.

Pumpkins

Pumpkins like corn, melons and squash. Marigolds and nasturtiums deter beetles and oregano provides general pest protection. They dislike potatoes.

Purslane

This edible weed makes good ground cover in the corn.

Pyrethrum (Painted Daisy)

When used as a dried flower kills insects, especially aphids.

Radishes

Radishes have no enemies, but love carrots, beans, melon, lettuce, peas or cucumbers. They are good with squash to repel cucumber beetles. Nasturtium and chervil give good flavor. Leaf lettuce makes radishes tender. They hate hyssop. Good for all vine crops.

Raspberry

Raspberries dislike potatoes and blackberries.

Rosemary (Rosmarinus officinalis)

Has been considered a pest repellent because of its strong scent and the bluish-white flowers are supposed to repel various moths and root flies. Companion to cabbage, bean, carrots and sage; deters cabbage moth, bean beetles and carrot fly. Cut branches laid on the ground in the garden are said to repel slugs and snails.

Rue (Ruta graveolens)

Keep it far away from sweet basil, sage and cabbage; plant near roses, thyme and raspberries; deters Japanese beetle and fleas.

Sage (Salvia officinalis)

Sage likes marjoram, cabbage, rosemary, strawberries and tomatoes and carrots; dislikes cucumbers and rue. Deters white cabbage moth, imported cabbage worm, carrot fly and various root maggots. Flowers attracts bees and other beneficial insects.

Salsify

Repels carrot fly.

Savory (Satureja hortensis – summer) and (S. montana – winter)

Repels Mexican bean beetle and improves the flavor of onions and beans when planted next to them.

Sowthistle

This weed in moderate amounts can help tomatoes, onions and corn.

Sovbeans

Soybeans shield corn from chinch bug.

Spinach

Spinach likes strawberries and the cabbage family.

Squash

Squash likes celery, corn, melons and pumpkins. Borage deters worms, improves growth and flavor; Marigolds deter beetles; Nasturtiums deter squash bugs and beetles; and oregano provides general pest protection. They dislike potatoes.

Strawberry

Strawberries dislike cabbage, but like lettuce, onions, thyme, dwarf beans, spinach and borage. Borage strengthens resistance to insects and disease; thyme, as a border, deters worms.



Summer Savory

Plant with beans and onion; improves growth and flavor. Deters bean beetles.

Sunflower

Sunflowers are good in corn for army worm but not in potatoes as they have an adverse effect. They also like cucumbers.

Tansy (Tanacetum Vulgare)

Plant under fruit trees; companion to roses and raspberries. Improves the flavor of nearby fruits and flowers.

Deters flying insects, Japanese beetles, striped cucumber beetles, squash bugs, flea beetles, aphids, cabbage worms and ants.

Tarragon

Good throughout gardens

Thyme (Thymus vulgaris, T. serphyllum)

Flowers attract bees and other beneficial insects and at the same time repels whiteflies, cabbage loopers and cabbage worms. It also is known to improve the flavor of the surrounding herbs and vegetables.

Tomatoes

Tomatoes like onions, cabbage, asparagus, carrots, celery, cucumbers, parsley and peppers. Deters asparagus beetles. Basil repels flies and mosquitoes and improves growth and flavor. Bee balm, chives and mint improve health and flavor. Dill, until mature, improve growth and vigor. Once mature, it stunts tomato growth. Marigolds deter nematodes. Pot marigolds deter tomato worms and general garden pests. They dislike corn, fennel, kohlrabi and potatoes.

Turnips

Turnips repel aphids, flies and spider mites. They are good with peas. They dislike potatoes.

Wormwood (Artemisia spp.)

Absinthe wormwood (A. absinithium) contains the growth inhibitor absinthin on the glandular hairs of the leaves and so nothing will grow near this plant. However, a solution made of the leaves is recommended against fleas and ticks and the fresh or powdered leaves are said to repel pests from stored grain. Southernwood (A. abrotanum) does not have the same reputation as absinthe and is recommended to interplant with vegetables, flowers and fruits. Southernwood is said to repel cabbage pests, codling moths and other flying insects. Wormwood is said to repel slugs and certain rodents.

Yarrow (Achillea spp.)

Attracts hover flies, lady beetles and beneficial wasps. Some gardeners say that the oil production of aromatic herbs is increased when yarrow is planted near them.

References:

Rodale's "Herb Book"

Organic Gardening for Health and Nutrition, by Editors of Organic Gardening

The Organic Way to Plant Protection, by Editors of Organic Gardening

Getting the Bugs out of Organic Gardening, by Staff of Organic Gardening and Farming

"Herbal Companions," *The Michigan Herb Journal*, by Mary L. Halfpenny, Winter 1995/96.



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