

A New Look at “Companion Planting”

A few notes from the book:

Plant Partners: Science-Based Companion Planting Strategies for the Vegetable Garden by Jessica Walliser

Chinese mustard greens: trap crop for protecting cole crops such as cabbage, broccoli, and cauliflower

- from Flea Beetles (less mobile – plant trap crop close)
- from Harlequin Bugs (highly mobile – plant trap crop further away); this stink bug has been found sucking juice from Haskap berries

Green onions: mask the scent of cole crops (except broccoli) from Flea Beetles

- also plant a crop of mustard greens to lure flea beetles away

Alfalfa: trap crop for protecting strawberries from Lygus Bugs

- alfalfa 2-3 % the size of your strawberry patch, should be located very close to strawberries, but don't allow to compete with berry plants

Alliums: mask volatile chemicals given off by peppers, to protect from Aphids

- plant onions, scallions, and garlic between and around pepper plants

Catmint: masks potatoes from Colorado Potato Beetle

Flowering Herbs (Calendula, Dill, Cilantro, Chamomile, Hyssop, Thyme, Basil:

- herbs mask host plants or interfere with egg-laying of Adult Cabbageworm Butterflies
- also a nectar source for various beneficial and predatory insects

Marigolds: reduces egg-laying behaviour of Root Maggot Flies in cole crops or onions

Cole / Cabbage Crops are targeted by Cabbageworm Butterflies and Onion Root Maggot Fly

- create a living mulch with **Thyme** or **White Clover** (don't allow to compete)
- interplant with **Marigolds**

Cover Crops and Living Mulches

The presence of low-growing cover crops and living mulches:

- Decrease the number of pests that spend part of their lifecycle underground. Females have a harder time reaching the soil for laying eggs
- May help to suppress fungal disease
- Support a wider variety of beneficial microbes
- Suppress weeds

Examples of Cover Crops

- Oats planted in late summer, winter killed; leave and plant into the straw residue. Plant potatoes the following spring to reduce Verticillium wilt.
- Grow oats with tall vegetables, chop and drop periodically to reduce height and shading.
- Field Peas and/or Buckwheat are annual crops that can be chopped and dropped to add nutrients to the soil.
- Grow crimson clover (annual) under taller vegetables.
- Combine potatoes and beans or corn and fava beans (for extra nitrogen).
- Combine peas and lettuce (to slow lettuce bolting); both like cool weather.
- Grow cucumbers under taller veggies to suppress weeds.

Attract Beneficial Insects as Predators or Pollinators

Include plants that attract parasitic wasps, ladybugs, lacewings, spiders, soldier beetles, syrphid flies, minute pirate bugs, damsel bugs, and many others. This will help with pests such as aphids, cabbageworms and (maybe) Colorado potato beetles.

- Plant members of the **Carrot family** (Apiaceae), including dill, cilantro, Heart-leaved Alexander, and fennel.
- Plant members of the **Aster family**, such as cosmos, rudbeckia, coreopsis, yarrow, sunflowers, Shasta daisies, zinnias, and asters.
- Plant members of the **Mint family** (Lamiaceae), including sage, marjoram, oregano, lemon balm, rosemary, and thyme, as they support parasitic wasps by providing them with nectar.
- Plant Lacy phacelia (*Phacelia tanacetifolia* and *P. integrifolia*) and Crimson clover to attract beneficials and pollinators.
- Plant Bunch Grasses for predatory ground beetles.

Other Strategies for Beneficial Insects and Pollinators

- Wait to remove leaves and dead plant material until it has warmed up to about 10-15 C.
- Put out bundles of old plant stems and/or leave 8-12 inches of stubble when cutting off old plant stems.
- Leave some dry, sandy soil areas uncovered for ground nesting bees.
- Drill holes of various sizes in wood logs (try to drill at least 6 inches into wood but not all the way through).

Additional Tips

Don't forget to also rotate your crops 😊 Remember "leafy –rooting – legumes – fruiting"

For example:

"Leafy" (lettuce, kale) followed by "Rooting" (carrots, beets) followed by "legumes" (beans, peas) followed by "fruiting" (tomatoes, cucumbers).

Online source of printable **graph paper for making a garden plan:**

<https://incompetech.com/graphpaper/>

Veggies that are less susceptible to Slugs

- arugula
- beets (sometimes prone)
- celery and celeriac
- chard
- chives
- cucumbers (young plants are endangered)
- endive, chicory, radicchio
- fennel
- garlic
- lamb's lettuce
- leeks
- melons (young plants are threatened)
- onions
- peas (sometimes young plants are vulnerable)
- potatoes (depending on the variety)
- spinach (some species and young plants can be susceptible)
- radish (depending on place and species, young plants can be susceptible)
- red-leafed lettuce (Lollo Rosso)
- rhubarb
- tomatoes