View of Sustainable Gardening

The "Magic" of Companion Planting

Written and photographed by Sean James



▲ Nasturtium, here near broccoli and cardoon, trap aphids.

ver the years, many ideas have been found and lost and sometimes found again. In between, those ideas often seem like junk or magic, the stuff of witch doctors. The question to ask to solve any challenge is "why?" Why does companion planting work? Which techniques work and which don't... and why? We are beginning to gain a deeper understanding of the interactions between species. Research is being carried out to give us the real reasons so we know what to believe and what not to.

Some interactions are fairly obvious. The "Three Sisters" involve corn, beans and squash. Corn is a heavy feeder and the beans, in fact all legumes

and a few other plants, take nitrogen from the air to fertilize themselves and share it with the surrounding plants. The squash shades the roots of the corn and beans, keeping heat down and preserving moisture.

Conversely, there are plants whose benefits are still up for debate. Some research has shown that mosquito plants, a type of geranium, don't actually repel mosquitoes. Other research shows that carrots do actually help tomatoes. Marigolds release a chemical from their roots that hinders many microscopic creatures and attracts pollinators to their

The most interesting kind of companion planting is lure cropping, planting a plant which attracts a pest. It goes against intuition but planting lupines or fava beans ensures a regular population of aphids. Why would any gardener want this? Always having aphids ensures you'll always have predators such as ladybird beetles and lacewings. If the aphids have a population explosion elsewhere in your garden, predators are on standby to bring things under control. Nasturtiums will also trap aphids, protecting cabbages, beans, squash and their relatives and even apple trees.

From the biodiversity files, attracting birds and pollinators to the garden will control pests. We need pollinators for food and birds, well, we just plain LOVE birds in our gardens. Planting shelter trees for birds and planting to ensure flowers early and late in the season for pollinators helps ensure pests will never get out of control. Even Japanese Beetles can be kept in check this way. Biodiversity practically guarantees balance and remember, a few pests are not a cause for concern. Many pollinators are also excellent predators and parasites. For example, the hoverfly is also an aphid predator and the tomato hornworm can be heavily predated upon by a beneficial wasp.

Many herbs such as sage and basil release volatile oils which could repel certain insects, or possibly mask the tasty scents of other crops from pests. While we enjoy onions in our food, most animals do not, so interplanting onions with plants that wildlife feed on, from tulips to roses, helps reduce feeding damage.

One of the niftier concepts is that of dynamic accumulators. Dynamic accumulators, many of which are weeds, have deep root systems which not only break up the soil but bring nutrients from deep in the soil to the surface. When these are thrown in the compost at the

end of the year or mulched into the garden they release these nutrients which have been used up on the surface. Thistles, Queen Ann's Lace and mullein are some of the prettier weeds but you may not want them in your garden. Switch grass is one of the more ornamental dynamic accumulators. Based on its deep root system, asparagus should be another, and it's quite beautiful when it's mature, especially in its golden fall colour stage.

We still have a lot to learn, or relearn, about companion planting...and garden ecology in general. As usual, the lesson is that Mother Nature knows how to do it. Take her lead and life will be easier, your flowers will be less work and more beautiful and your veggies will be more plentiful. Read up, experiment...and don't get too stressed about minor problems. Gardening should be fun! **NEV**

Sean James is the owner of Fern Ridge Landscaping and Eco-consulting and is the Chair of Landscape Ontario's Environmental Stewardship Committee, a past president of the Milton Horticultural Society and a member of the Perennial Plant Association's Environmental Committee. Email him through editor@NEViews.ca or reach him through www.fernridgelandscaping. com/forum.

