## Your Own Vegetable Garden of Eden: Companion Planting by Betty Hensley

Just as there are many wonderful benefits to finding that right companion in life, there is also something special and fascinating about companion planting. According to the Cornell University Gardening Resources factsheet, Companion Planting:

"Plants are very active in ways that are not so obvious to the casual observer. For example, plants change the chemistry of the soil, and influence the types of microorganisms that grow there. They actively compete with other plants for space. Some will poison their neighbor's offspring to maintain a competitive advantage, while others change the environment in ways that benefit other species. Plants wage a constant battle with insects, relying heavily on chemical warfare."

Plants that assist each other to grow well, plants that repel insects—even plants that repel other plants—are all part of the gardening world that has never been fully explored. Again, following Cornell University's advice, try some of the following combinations that folklore says are effective. Observe the effects carefully and document your observations. Create your own experiments and share your results. "Testimonials that are shared by many observers often turn out to be valid."

Vegetable gardeners may find that companion planting provides many benefits, one of which is protection from pests. For instance, a major enemy of the carrot is the carrot fly, whereas the leek suffers from the onion fly and leek moth. Yet when leek and carrots live together as companions, the strong and strangely different smell of the partner plants repel the insects so much that they do not even attempt to lay their eggs on the neighboring plants. Even when plants are affected by diseases, a mixed plant culture can usually reduce the problem.

Wild plants also play a vital part in the plant community. Some have the ability to collect trace minerals from the soil. They actually can store in their tissues up to several hundred times the amount contained in an equal amount of soil. These plants, many of which are considered weeds, are useful as compost, green manure, or mulch.

An entirely different type of community life is that of a fruit and nut trees. For many of this group, the choice of good companions is not only helpful but essential. Have you ever experienced the disappointment of having a beautiful fruit tree blossom, be visited by the bees, and yet fail to bear? There is a reason of course, and it lies in pollination-companion planting.

Here is a brief list of some of the many possible combinations of companion plants that you may want to try:

- Dill and nasturtiums both make good companions for squash and cucumber because they repel squash bugs and attract beneficial insects.
- Sweet corn does well with potatoes, peas, pumpkins and squash (corn, legumes and the squash family are the traditional "Three Sisters")
- Sow two or three radish seeds in cucumber hills to protect against cucumber beetles. Do not pull the radishes, but let them grow as long as they will.
- Lettuce grows well with strawberries, cucumbers and carrots.
- Pumpkins grow well with corn, but pumpkins and potatoes have an inhibiting effect on each other.
- Because of its saponin content, spinach is a useful pre-crop and does well planted with strawberries.
  - Tomatoes dislike cabbage, potatoes and fennel, but will protect asparagus.



And last but not least, is garlic. Garlic is often recommended as an effective control for many insects. Try this recipe from the Golden Harvest Organics website for garden use: Take 3 to 4 ounces of chopped garlic bulbs and soak in 2 tbsp. of mineral oil for a day. Add 1 pint of water in which 1 tsp. of fish emulsion has been dissolved. Stir well. Strain the liquid and store in a glass container. Dilute, starting with 1 part to 20 parts water, and use as a spray against your worst insect pests. NOTE: Do not spray any oil-containing spray when the temperature is above 80 degrees. It will cause damage to the plant.

Gardening questions are answered FREE for the asking; give a Master Gardener a call at the UCCE Tuolumne County Master Gardener Hotline at 209.533.5912 or email <a href="mgtuolumne@ucdavis.edu">mgtuolumne@ucdavis.edu</a>

Betty Hensley is a long-time Tuolumne County Master Gardener who grows an abundant vegetable garden.