

There are other methods used by organic gardeners and farmers to reduce pests and diseases. They also deserve important consideration:

1. Maintain a healthy soil with good drainage and air circulation. Use plenty of compost.
2. Plant pest and disease resistant varieties when available.
3. Rotate crops to avoid a build-up of pests in any one area from year-to-year.
4. Practice good sanitation by removing diseased plants, turning under or composting wastes.
5. Learn to identify insects and diseases so that you will be able to detect problems early.
6. Control insects by handpicking, destroying eggs, using physical traps, homemade sprays.
7. Encourage natural enemies of insects such as toads, birds, ladybugs, praying mantis.
8. Weed out weak or susceptible plants.
9. Spray natural insecticides (e.g. BT - bacillus thuringiensis, diatomaceous earth, insecticidal soap) only if other methods fail and spray only affected plants.

**Standard sources on the topic include::**

Organic Plant Protection, Rodale Press 1976  
Organic Gardening Magazine, Feb. 1972, Rodale Press  
Sunset Guide to Organic Gardening, Lane Books, 1974  
Peacock, Manure and Marigolds. Janet Gillespie, Ballantine Books, 1972

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# Protecting Plants Using Other Plants



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The practice of protecting plants with other plants has been developing since man first started gardening. Through careful observation and experimentation s/he has noticed certain relationships in existence between plants and between insects and plants. Companion planting is the usual name given to the practice of planting according to these relationships, but actually four different practices are involved here. They are:

1. **Mixed Planting** - planting several different plants together, as in nature, so that insects are confused by the multitude of smells and have more difficulty finding the plant they prefer to eat and lay their eggs on.

2. **Repellant Planting** - certain plants such as marigolds, mints and garlic are offensive to one or more species of insects and if planted near a plant you want protected will deter insects from it.

3. **Companion Planting** - combinations of plants produce crops that grow better and healthier because of their proximity.

4. **Trap Planting** - lure plants are located near a plant you want protected. Insects attack them and then can be handpicked and destroyed.

**The following is a list of some herbs and flowers used in the above methods of planting:**

**Basil** - companion to tomato. Improves growth and flavour, repels flies and mosquitoes.

**Dill** - plant near tomatoes as a trap for the tomato hornworm.

**Garlic** - plant near roses, raspberries. Improves growth and health; deters Japanese beetle.

**Lamb's Quarters** - trap for aphids. Allow to grow throughout garden, especially in corn.

**Marigolds** - especially the smelly types (i.e. Mexican, African, French). Plant throughout the garden. Discourages Mexican bean beetles, nematodes and other insects.

**Mint** - companion to cabbage, tomato. Improves health, flavour, deters white cabbage moth.

**Nasturtium** - companion to radish, cabbage, cucurbits. Plant under fruit trees. Trap for aphids. Deters squash bugs and striped pumpkin beetle.

**Wormwood** - use as perennial border to keep small animals away. Deters flea beetles.

**A partial list of which plants are companion, which antagonists, that may be useful when planning your vegetable garden:**

**Bush beans** - like potatoes, corn, cucumbers, summer savory. Dislike onions.

**Cabbage family** - likes peas, leaf lettuce, tomatoes. Dislikes dill.

**Tomatoes** - like onion, parsley, asparagus, marigold, carrot. Dislike potato, cabbage.

**Peas** - like carrots, turnips, cucumber. Dislike onion, garlic, potato.

You will never keep all of the bugs out of your garden and shouldn't, because most of them are beneficial, very few actually do harm. Beside, recent research has indicated that plants produce excessive foliage and can afford some pruning. This pruning in itself is often beneficial (i.e. increasing yields, increasing vitamin content of fruit in certain plants). So remember when planning your next garden, do experiment with these forms of plant protection. No doubt you will come up with your own workable combinations.