



Urban Harvest

Pests Need to Have their Own Pests

By Bob Randall, Ph.D.

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If you have lived in drier or colder parts of Texas or the rest of the nation, and have recently started gardening here, you have probably been struck by the abundance of insects and other creatures flying and crawling about. The main reason for this is that we have plenty of rainfall and warmth year round.

Frequently, gardeners confronted with something bothering their tomatoes, roses, peaches, lawn or legs ask: "What pesticide should I use?" There are an increasing number of minimally toxic effective products, but for several reasons pesticides do not easily stop our pests here.

First, most insects breed quickly and are adept at hiding, so it is hard to reach all of them with a sprayer even when we have the time and energy to do it and know enough to match the correct spray to the bug in question.

Second, our abundant rainfall often washes the pesticide away from where it was put hours after a spray. So to be effective, pesticides need to be reapplied frequently by someone with time and skill. Since bees and other pollinators shouldn't be sprayed, you need to spray late in day when the wind isn't blowing. If you commute this could be a problem.

Third, you need to wear adequate protective clothing. All pesticides are poisons and should not be touched or breathed. Respirators and rubber protective suits (see links at <http://www.gemplers.com/personal-protection>) are costly and too hot to wear in our climate, but it is difficult to avoid exposure otherwise, so spraying is difficult and uncomfortable.

Fourth, pesticides often kill the pests' natural enemies as easily as they kill pests, so even when the spray is the correct one correctly applied, with adequate safety precautions, it may still lead to an increase in pests later on. So homeowners with a spray program do not easily achieve cost-effective pest control.

Pesticides don't destroy pests; they just slow them down. To destroy them, you need to stop them breeding or feeding. The poison strategy keeps the gardener continually

spraying year after year, and because it decreases natural controls, in the hands of beginners, it usually makes things worse!

Instead, plant pests and diseases are more easily and cheaply stopped by their natural enemies, predatory insects, birds and other creatures, parasitic insects that lay eggs in pests, and soil microorganisms that destroy soil pests. If beneficials aren't poisoned, and they are provided what they need to thrive, they will spend their days in your garden destroying your pests.

Fall is an excellent time to provide these needs by improving your landscape. First, diversify your landscape. A garden where almost all the plants are one thing -- oak trees, turf grass, azaleas or tomatoes for example is one that will be full of pests. If you provide oak pests or tomato pests what they need, and don't provide the pests of the pests what they need, you are asking for trouble.

Diseases and pests do not attack all plants equally, but typically go after certain botanical types of plants. So if you have many different kinds of plants in the landscape, you minimize the likelihood that most of your landscape will get sick or eaten all at one time. A landscape with natives, trees, shrubs, shady and sunny areas, damp and dry habitats will moderate whatever our climate, pests and diseases decide to do.

There are dozens of things you can do to encourage pests for your pests. Make sure there is always a supply of fresh water such as a birdbath in the yard, have a large perennial flowerbed that provides cover and shelter for toads and lizards year-round, mulch everything with rotting leaves or shredded composted tree branches, and avoid using toxic substances.

As well, be sure to grow plants whose **flowers attract adult beneficial insects**. These beneficials only use flower nectar from a few plants, so you need to grow these plants.



'Florence' fennel is not only a vegetable and herb, but blooms over a long period attracting many beneficial insects.

If you do, the beneficials will "start families" by laying eggs in your pests, and these will dispatch your pests.

Late fall is the time to plant native flowering trees like Carolina buckthorn and important herbs like cilantro, fennel, Italian flat-leafed parsley, and mint that will bloom next spring and attract pests for your pests.

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