

## Stinging Insects in the Garden

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The presence of stinging insects around the garden or yard often generates concern among gardeners and home owners. Many people fear insect stings, often believing themselves to be dangerously allergic. However, the vast majority of people who are stung will experience no more than a local reaction or at most a mild systemic reaction. Current evidence suggests that fewer than 0.4 percent of the population will have a more severe systemic reaction, with a very much smaller percentage of that group in danger of a true life-threatening reaction. Still many people want to control or reduce the number of stinging insects around the house or garden.

The selection of flowering garden plants that will not attract any of the stinging insects is almost impossible. In part, this is due to the diversity of insects and the wide variety of factors involved in the attraction of insects to flowers. One must also realize that not all of the insects attracted to flowers or garden plants are bees. In addition to a large number of butterflies and flies (some of which are excellent bee mimics), many species of wasps visit flowers, some for the collection of nectar, others in search of insect prey. The elimination of bee flowers, therefore, will not necessarily eliminate the insects capable of stinging. Furthermore, a number of different wasp species can usually be found foraging around houses and gardens for insect prey, visiting plants with populations of aphids or scale insects to collect honeydew, or simply searching for potential nest sites. Yellowjackets, for example, may construct nests in dense shrubs or in the ground. Many of the flower wasps (Sphecidae) also nest in the ground, as do spider wasps and many solitary bees. The avoidance or elimination of stinging insects thus involves more than just the elimination of attractive flowers. In fact, the majority of insect stings are not caused by bees but by yellowjackets. This

group of social wasps (which are often mistaken for bees) accounts for over 70 percent of insect stings in most areas. However, if bees are a concern, there are a number of different types of flowers that are not attractive to bees and if planted will help to reduce the number of bees in and around garden areas.

The selection of flowers that do not attract bees is, in part, dependent upon an understanding of why bees visit flowers and what makes a flower attractive. To a bee, flowers represent a source of food; they are visited for the collection of pollen and/or nectar. Flowers that secrete large amounts of nectar or pollen are thus highly attractive, and those that do not produce much nectar or pollen are rarely visited. Attraction is also dependent upon color and scent. Brightly colored flowers usually attract bees, at least for an initial inspection visit. Blue, yellow, orange, purple, and white flowers are all inviting to foraging bees. The most attractive floral colors are blue, yellow, and white; especially yellow and white, which reflect ultraviolet light. Red flowers, in general, are less attractive to bees.

With this in mind, the following list of flowers represents a group that should be non-attractive or only minimally attractive to the bees capable of inflicting a serious or painful sting. (Some of these flowers may attract small solitary bees, such as the sweat bees, but none of these possess a very potent sting.) This group includes carnation, chrysanthemum, daisy, the red dianthus, geranium, marigold, rose, strawflower, and zinnia. Other flowers may also be minimally attractive to bees. Those concerned with the reduction of bee populations should try planting small groups of different flowers and watching to determine if bees or other stinging insects visit them.