Ways to Improve Pollination in the Veggie Garden

If your plants aren't producing as much as they should, they might need a little help from you

By Chris McLaughlin | Fine Gardening - Issue 157

Procreation in the garden is pretty simple. The pollen from a flower's stamen has to find the ovary (pistil) in another—or sometimes the same—flower; the plant is now pollinated, and fruit and seed will form. So how can we make sure that our veggie plants become pollinated and, therefore, bear fruit?

The plants are certainly doing their part. Flowers have evolved, over time, to attract pollinating insects, primarily through color and scent, and those insects do the job of transporting pollen from flower to flower. Most of the time, nature's plan works perfectly—except for when it doesn't. Sometimes the insects don't hold up their end of the bargain. Perhaps an overuse of chemicals has killed off much of the local population of insect pollinators. Sometimes it's the weather or just plain old bad timing that prevents our plants from producing well.

Hand pollinating is a simple technique that comes in handy at times like these. But you can also use it before you have a problem—a preemptive strike, if you will. This technique is especially helpful with veggies like pumpkins, melons, cucumbers, and zucchinis, which bear two types of flowers: male blossoms (which carry pollen) and female blossoms (which house the ovary). Plan to pollinate once you notice that the female flowers are beginning to open. Then follow this simple step-by-step approach.

Step 1: Find the male and female flowers

Female flowers are easy to identify because they have a small fruit—or, more accurately, a potential fruit—that sits just behind the blossom. Oftentimes, gardeners spot this small undeveloped fruit and mistake it for a baby fruit, thinking that it's already been pollinated and will undoubtedly mature. When the fruit shrivels up and dies, it's easy to question where you went wrong or what you might have done to cause its untimely demise. But the truth is that the flower was never pollinated to begin with. You'll recognize the male flowers because they lack any immature fruit.

Step 2: Harvest a male flower

Find a male flower, and gently pluck it off at the middle of the stem that connects the flower to the main vine. Look for one that's beginning to blossom but hasn't opened fully just yet. Peel back and remove the petals from the male flower, exposing the pollen-bearing stamen.

Step 3: Transfer pollen to the female flower

Choose a female flower that's just beginning to open on the vine. Hold the female petals open, but don't remove them. Take your male flower and rub the stamen (male parts) all over the top of the pistil (female parts) of the female flower. Do this gently, as you don't want to break anything off of the female flower.

Step 4: Mark each pollinated flower

If you're interested in keeping insects from cross-pollinating plant varieties because you're saving seeds, then close the female's petals around the pistil; use a small rubber band or masking tape to keep the petals closed. If you just want to keep track of the female flowers you've pollinated each day, mark them by tying a string or ribbon loosely around their stems.

Tip: Help self-pollinators along too

Tomatoes, peppers, beans, and eggplants have flowers that are referred to as "perfect," meaning both male and female parts are combined in one blossom. These flowers usually pollinate themselves effectively, provided that they are jostled by wind or visited by active insects. But even these self-sufficient plants can use a little help once in a while. All you have to do is, from time to time, grasp a flowering branch with your thumb and forefinger and give it a little shake or gently tap it as you walk by.

10 plants that attract natural pollinators

Let's face it: What we really want in our gardens are more natural pollinators. Below are some insect-enticing plants that are sure to bring all the bees to your yard.

Yarrow

Achillea spp. and cvs.

USDA Hardiness Zones 3–9

A summer- to fall-blooming perennial, yarrow is available in hundreds of varieties.

Sweet alyssum

Lobularia maritima and cvs.

Annual

Sweet alyssum blooms from early spring through the end of fall. Count on this little annual to reseed.

Coreopsis

Coreopsis spp. and cvs.

Zones 4–9

Coreopsis, a late spring– to midsummer-blooming perennial, blossoms primarily in shades of gold.

Purple coneflower

Echinacea purpurea and cvs.

Zones 3–9