

Remove Old Flowers to Extend Bloom Season of Flowers

Daniel E. Mullins
June 19, 2003

The flowering season of many annuals and perennials can be extended greatly by deadheading. This is a horticultural term that means the removal of old, spent flowers before they go to seed.

This need for deadheading was recently brought home to me in a public planting. We had established several different kinds of flowering annuals to beautify one of the Extension offices and the plumed celosia was the first to show signs of the need for deadheading. After a few weeks of good color they refused to grow any more and new flower spikes were weak and slow in being reproduced. They have now had the old flower stalks removed and we expect some vigorous growth and a new set of blooms soon.

The goal of many flowering annuals and perennials is to reproduce themselves. Once this has been accomplished through seed production, plants change physiologically. Often the growth rate and flowering for the remainder of the season ceases or is greatly reduced.

These two stages of growth – vegetative and reproductive, are distinctly different. In addition to differences in the growth rate and flowering, the amount of nutrient uptake changes dramatically once plants enter the reproductive cycle. I have learned just how much different that these stages are through plant sap tests done on commercial tomato fields. Tomato is obviously not considered an ornamental flowering plant, but the principal is the same.

Young tomato plants while in the vegetative or growth stage, if properly fertilized, will have plant sap readings for nitrogen of about 1,000 parts per million. As soon as fruit set occurs and the young tomatoes reach a diameter of one inch, the nitrogen level in the plant sap drops by approximately one-half. After two pickings, the level is somewhere between 200 and 300 parts per million.

Tomato is used as an example because much research has been done on this plant and the optimum levels for nitrogen in the plant sap at various stages have been developed. The point is that once seed fruit and seed production begins, the plant is reaching its goal of reproducing itself and there is no need to repeat the process. Obviously, you would not remove the flowers from tomato plants because fruit production is the goal in this case.

Deadheading of flowering annuals and perennials therefore prevents the plants from going into the reproductive stage, producing seed, and shutting down. Once old flowers are removed, the plants must grow again in order to flower. This process can continue throughout the summer with well adapted flowering annuals.

The procedure is simple, just wait until flower spikes or individual flowers start to decline and then clip the stem just below. Enjoy the flowers during their peak, but don't wait too long. Once seed set occurs, the depletion of the plant's stored energy begins.

Leave as much foliage on the plants as possible when deadheading unless they have become extremely tall and unruly. In this case, they can be cut back by one-third without serious damage.

Some gardeners establish a routine of deadheading. After each flush of bloom has faded, plants are cut back to remove old flowers and fertilized to encourage new growth. This practice can stimulate some flowering

Remove Old Flowers to Extend Bloom Season of Flowers

annuals and perennials to produce 3 or 4 flushes of growth and continued flowering through the spring and summer.

** Daniel E. Mullins is Extension Horticulture Agent in the University of Florida IFAS Extension in Santa Rosa County .*