Why Plants Fail to Flower or Fruit

It can be very disappointing to wait eagerly for a favorite plant to flower and it never does. Flowers and fruits are major horticultural features of plants and can fail to form for many different reasons. Plants that do not flower are often too young, or there is not enough light. If there are no flowers on a plant, there can be no fruits formed. Some other common causes are discussed below.

Why Doesn't My Plant Flower?

Age of Plant: Being too young or immature is a very common reason that many trees do not flower. Plants need to reach a certain level of maturity before they begin to flower each year. Trees in particular usually need three to five years after transplanting before flowering.

Growing Conditions:

Shade: Lack of adequate light is another very common reason that many types of plants do not flower. Plants may grow but not flower in the shade.

Cold or Frost Injury: Cold weather may kill flower buds or partially opened flowers. Plants that are not fully hardy in your area are the most susceptible to this type of cold injury.

Drought: Flowers or flower buds dry and drop off when there is temporary lack of moisture in the plants.

Improper Pruning: Some plants bloom only on last year’s wood. Pruning plants at the wrong time of the year can remove the flower buds for next year’s blossoms. Many spring flowering plants, such as azaleas begin setting next year’s flower buds in the late spring. Pruning these plants in the summer or fall may prevent flowering next year. Cutting back a plant severely, such as with climbing roses, can remove all the flowering wood.
Excessive pruning of crape myrtles will damage future flower buds.
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**Nutrient Imbalance:** Too much nitrogen can cause plants to produce primarily leaves and stems. The plant will be large and usually very green and healthy but will have few or no flowers.

**Cold Period Required:** This is true for most spring flowering bulbs. Some trees planted in latitudes in which they do not normally grow may also fail to bloom. Various apple cultivars and peaches require exposure to certain periods of low temperatures, or flowering will not occur.

**Why Doesn't My Plant Have Fruits?**

**Poor Pollination:** This is one of the most common causes of no fruit. Some plants cannot pollinate themselves. They require a plant of the same species, but a different variety for cross-pollination and maximum fruit set.

Pollinators transfer pollen from male flowers (above) to female flowers in cucurbit species. The absence of pollinators or low numbers of female flowers can result in fewer fruits produced.
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**Separate Male & Female Plants:** Some types of plants have only either male or only all female flowers. The plant with female flowers can form fruit, but only if a male plant is nearby for this to occur. Some examples of plants affected this way are holly, yew and ginkgo.

**Weather:** A freeze that occurs while a plant is in flower can kill the flowers and prevent fruit set.


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