



Apple Tree Pollination Information

To obtain a good fruit set, fruit trees must be cross-pollinated, unless that particular variety of apple tree is self-pollinating. Fruit trees are pollinated or cross-pollinated when the wind, birds, bees, or other insects carry pollen from one variety of apple tree to another. Blooming periods for different trees occur at different times. Weather patterns can change from year to year and influence the time flowers come into bloom or break dormancy. The chart we have developed (apple bloom time for pollination) is provided on the next page, which lists the relative bloom times of all the apple varieties we offer.

In most cases you will need to plant more than one apple variety to get the best pollination and a good fruit set. The exceptions to this rule are combination trees, which have more than one variety of apple grafted onto the single trunk of the tree. This combination apple tree has specific varieties, which are compatible and pollinate each other. A combination tree is a good choice when space is limited and you desire to plant several varieties of fruit trees.

Some apple tree varieties are triploid, meaning they have sterile pollen, and will not pollinate other apple trees. These trees need pollen from another variety of apple tree in order to set fruit. Gravenstein or King apple trees, for example, are triploids, and need other trees of the same bloom time for complete pollination. Plant a Gravenstein apple tree with a Yellow Transparent and a Summerrred apple tree; a King apple tree with Northern Spy and a Spartan apple tree. *Note: Triploid apples are marked with an * next to their name on the chart on the next page.*

In conclusion: The closer the two varieties are in bloom time, the more their blooms will overlap and the more pollination will occur.

Mother nature can often throw curveballs in the spring. Weather conditions shift ahead or behind therefore to be on the safe side for best pollination, choose varieties from a matching column or an adjacent column on our Apple Bloom Time for Pollination chart. Several varieties are known to have a long bloom time and appear in more than one column.

Other factors also affect pollination: distance between plantings, sun exposure, soil conditions, available nutrients, pruning (or lack of), heavy rain/hail and cold weather events such as hard frosts when trees are blooming.

If the weather conditions are on the drier and warmer side, honey bees, orchard mason bees and bumble bees all help to pollinate blooming trees. The presence of Orchard Mason Bees can help increase pollination rates in almost every case since they are more hardy and tolerant of cooler and wet weather, much better than the other bees.

It is most important for young orchards (from new planting to 5-8 year old trees) to have adequate fertilizer, water, disease and insect control so that they will have optimum growth and spur fruit/bud production. To increase both the quantity and quality of your fruit production, develop a good skeletal form by promoting a strong trunk and a few main branches with annual pruning.

Following these steps above will help you enjoy the thrill and flavor of biting into your own homegrown apple.