

POLLINATION

Fruit & nut tree pollination is the process by which pollen from the male flower parts are transferred to the female parts by pollinating insects, thus resulting in seed and fruit development. Weather plays a vital role during the flowering period. Frost/freeze events, prolonged rains or high winds can reduce pollination success & therefore quantity of fruit. Bee activity is critical, so having other inviting spring blooming plants nearby will increase your chances of successful pollination.

Selected tree varieties are able to produce fruit on their own, hence the term *SELF-POLLINATING*. Most **Apricot**, **Tart Cherry**, **Nectarine**, **Peach** and **European Plum** fall into this category. However, heavier crops will occur if a different variety of that type is available to cross-pollinate with.

The remaining tree varieties, including **Apple**, **Pear**, **Sweet Cherry**, **Pawpaw**, **Chestnut**, **Hazelnut** and **Japanese Plum** require a *SECOND VARIETY* of the same tree type to properly cross-pollinate with. **Please note that 2 trees of the same variety will not pollinate each other**. Locate cross-pollinating varieties within 50' of one another to help insure bee activity and pollen exchange between the trees.



APPLE

Bloom time is very important for apple tree pollination. Apples have a wide range of bloom times. For proper cross-pollination choose varieties that bloom at the same time or close to each other. An early and late variety will not pollinate each other, but an early and mid or mid and late should be successful.

| APPLE POLLINATION CHART | BLOOM TIME | Empire | Gala | Golden Delicious | Granny Smith | Honeycrisp | Kinderkrisp | Liberty | Mcintosh | Pink Pearl | Red Delicious | Red Fuji | Red Prairie Spy | Zestar |
|--|---------------|--------|------|-------------------------|---------------------|------------|-------------|---------|----------|------------|----------------------|----------|-----------------|--------|
| Empire | early | Ν | Υ | Ν | Ν | Υ | Υ | Υ | Υ | Ν | Ν | Υ | Ν | Υ |
| Gala | mid | Υ | Ν | Υ | Υ | Υ | Υ | Υ | Υ | Ν | Υ | Υ | Υ | Υ |
| Golden Delicious | mid-late | Ν | Υ | Ν | Υ | Υ | Ν | Ν | Ν | Υ | Υ | Υ | Υ | Ν |
| Granny Smith | mid-late | Ν | Υ | Υ | Ν | Υ | Ν | Ν | Ν | Υ | Υ | Υ | Υ | Ν |
| Honeycrisp | mid | Υ | Υ | Υ | Υ | Ν | Υ | Υ | Υ | Ν | Υ | Υ | Υ | Υ |
| Kinderkrisp | early-mid | Υ | Υ | Ν | Ν | Υ | Ν | Y | Υ | Ν | Ν | Υ | Ν | Υ |
| Liberty | mid | Υ | Υ | Ν | Ν | Υ | Υ | N | Υ | Ν | Ν | Υ | Ν | Υ |
| Mcintosh | early-mid | Υ | Υ | Ν | Ν | Y | Y | Υ | Ν | Ν | Ν | Υ | Ν | Υ |
| Pink Pearl | late | Ν | Ν | Υ | Υ | Ν | Ν | N | Ν | Ν | Υ | Ν | Υ | Ν |
| Red Delicious | mid-late | Ν | Υ | Υ | Υ | Υ | Ν | Ν | N | Υ | Ν | Υ | Υ | Ν |
| Red Fuji | mid | Υ | Υ | Υ | Υ | Υ | Υ | Υ | Υ | N | Υ | Ν | Υ | Υ |
| Red Prairie Spy | mid-late | Ν | Υ | Υ | Υ | Υ | Ν | Ν | Ν | Υ | Υ | Υ | Ν | Ν |
| Zestar | early-mid | Υ | Υ | Ν | Ν | Υ | Υ | Υ | Υ | Ν | Ν | Υ | Ν | Ν |
| FLOWERING CRAB | | | | | | | | | | | | | | |
| Coralburst | mid | Y | Y | Y | Υ | Y | Υ | Y | Υ | Ν | Υ | Y | Υ | Y |
| Gladiator | mid | N | Υ | Y | Υ | Y | Υ | Y | Υ | Ν | Υ | Y | Υ | Y |
| Lollipop | mid-late | Ν | Υ | Υ | Υ | Υ | Ν | Ν | Ν | Υ | Υ | Υ | Υ | Ν |
| Prairefire | mid | Υ | Υ | Υ | Υ | Υ | Υ | Υ | Υ | Ν | Υ | Υ | Υ | Υ |
| Royal Raindrops | mid-late | Ν | Υ | Y | Υ | Y | Υ | Y | Υ | Υ | Υ | Υ | Υ | Υ |
| Y - Good variety for cross pollination | | | | | | | | | | | | | | |

SWEET CHERRY

Sweet cherries require a second variety of sweet cherry for crosspollination. Some sweet cherries are self-pollinating, but will produce more if they are planted with second variety.

| SWEET CHERRY POLLINATION CHART | | POLLINATOR INFORMATION | Bing | Black Tartarian | Craig's Crimson | Evans Bali | Lapin | Montmorency | Rainier | Sweet Cherry Pie | |
|--|-------------------------------|---------------------------|------|-----------------|-----------------|------------|-------|-------------|---------|------------------|--|
| Bing | | RP | Ν | Υ | Υ | Y | Υ | Υ | Υ | Υ | |
| Black Tartarian | | RP | Υ | Ν | Υ | Υ | Υ | Υ | Υ | Υ | |
| Craig's Crims | Craig's Crims <mark>on</mark> | | Υ | Υ | Ν | Υ | Υ | Ν | Υ | Ν | |
| Evans Bali | | SP | Υ | Υ | Υ | Ν | Υ | Υ | Υ | Υ | |
| Lapin | | SP | Υ | Y | Υ | Y | Ν | Υ | Υ | Υ | |
| Montmorency | / | SP | Y | Υ | Ν | Ν | Ν | Ν | Υ | Υ | |
| Rainer | | RP | Y | Υ | Υ | Y | Υ | Υ | Ν | Υ | |
| Sweet Cherry | Pie | SP | Υ | Υ | Ν | Ν | N | Υ | Υ | Ν | |
| | | | | | | | | | | | |
| RP - requires pollinator | | | | | | | | | | | |
| SP - self pollination; will produce more with second variety | | | | | | | | | | | |

PEAR

Pears require a second variety of pear for cross-pollination. Asian pears can be pollinated by a different Asian pear or by Bartlett or Bosc. European pear varieties are fully compatible.

| PEAR POLLINATION CHART | Туре | Asian, Shinko | Asian, Tawara | Anjou | Bartlett | Bosc | Comice | D'Anjou | Red Bartlett | Summercrisp | |
|---|----------|---------------|---------------|-------|----------|------|--------|---------|---------------------|-------------|--|
| Asian, Shinko | Asian | Ν | Υ | Ν | Υ | Υ | N | Ν | Ν | N | |
| Asian, Tawara | Asian | Υ | Ν | Ν | Υ | Υ | Ν | Ν | Ν | Ν | |
| Anjou | European | Ν | Ν | Ν | Υ | Υ | Υ | Υ | Υ | Υ | |
| Bartlett | European | Y | Υ | Υ | Ν | Υ | Y | Υ | Υ | Υ | |
| Bosc | European | Υ | Υ | Υ | Υ | Ν | Υ | Υ | Υ | Υ | |
| Comice | European | Ν | Ν | Υ | Υ | Υ | Ν | Υ | Υ | Υ | |
| D'Anjou | European | Ν | Ν | Υ | Υ | Υ | Y | Ν | Y | Υ | |
| Red Bartlett | European | Ν | Ν | Υ | Υ | Υ | Y | Υ | Ν | Υ | |
| Summercrisp | European | Ν | Ν | Υ | Υ | Υ | Y | Y | Y | Ν | |
| | | | | | | | | | | | |
| Y - Good variety for cross pollination | | | | | | | | | | | |
| N - Will not cross pollinate that variety | | | | | | | | | | | |

PLUM

Most European plums are self-pollinating, but will produce more if planted with a second variety. Japanese plums require a second variety of Japanese plum for cross-pollination.

| PLUN POLLINA CHAR | n TION T | POLLINATOR INFORMATION | Туре | Duarte | Elephant Heart | Green Gage | Italian Prune | Red Ace | Santa Rosa | Shiro | Stanley Prune |
|---|----------------|---------------------------|----------|--------|----------------|------------|---------------|---------|------------|-------|---------------|
| Duarte | | RP | J | Ν | Υ | Ν | Ν | Y | Y | Y | Ν |
| Elephant Hear | t | RP | J | Υ | Ν | Ν | Ν | Y | Υ | Υ | Ν |
| Green Gage | | SP | E | N | N | Y | Y | Ν | N | N | Y |
| Italian Prune | | SP | E | Ν | Ν | Υ | Υ | Ν | Ν | Ν | Υ |
| Red Ace | | RP | J | Υ | Υ | Ν | Ν | Ν | Υ | Υ | Ν |
| Santa Rosa | | SP | J | Υ | Υ | Ν | Ν | Υ | Υ | Υ | Ν |
| Shiro | | RP | J | Υ | Υ | Ν | Ν | Υ | Υ | Ν | Ν |
| Stanley Prune | | SP | E | Ν | Ν | Υ | Υ | Ν | Ν | Ν | Υ |
| | | | | | < | | | | | | |
| RP - requires p | ollinator | | | | | | | | | | |
| SP - self pollina | tion; will p | roduce more wit | th secor | nd va | ariet | y | | | | | |
| E - European Plum | | | | | | | | | | | |
| J - Japanese Plum | | | | | | | | | | | |
| Y - good pollinator for that variety | | | | | | | | | | | |
| N - will not cross pollinate that variety | | | | | | | | | | | |

* Varieties may vary by location and time of the year



