



Apple Pollination Chart

Apples need to cross-pollinate with another apple variety for good fruit set, and both must be in bloom at the same time. Select a cultivar in the left column and read across the chart to choose pollination partners. Blank squares indicate reliable pollination partners. This chart summarizes data for apples Sky has carried recently. See reverse for additional information on pollination, including bloom times of some other popular varieties.

Usually the earliest to bloom	Usually the third group to bloom	Will not pollinate
Usually the second group to bloom	Usually the last to bloom	X Bloom times may not overlap

Select a cultivar below. Read across to see how good other cultivars are as pollination partners.	Akane	Ashmeads Kernel	Bramley	Chehalis	Cosmic Crisp®	Fuji (Beni Shogun)	Crab Dolgo, Whitney	Crab Ever, Transc.	Early Pink Lady	Enterprise	Gala	Golden Sentinel	Granny Smith	Gravenstein	Honeycrisp	Liberty	Macoun	Melrose	North Pole	Pristine	Redlove Calypso	Scarlet Sentinel	Spartan	Sunrise Magic®	Urban® Columnar	Williams' Pride	Zestar
Akane				X						X	X		X				X										
Ashmead's Kernel																					X					X	X
Bramley	X					X	X								X				X	X	X	X				X	X
Chehalis																					X	X				X	X
Cosmic Crisp®	X				X	X									X				X	X	X	X				X	X
Fuji (Beni Shogun)																					X					X	X
Crab: Dolgo, Whitney				X							X	X		X			X										
Crab: Evereste, Transc																					X					X	X
Early Pink Lady				X							X	X		X			X										
Enterprise																					X					X	X
Gala	X				X	X										X			X	X	X	X				X	X
Golden Sentinel																					X					X	X
Granny Smith	X				X	X										X			X	X	X	X				X	X
Gravenstein			X	X	X	X	X	X	X	X	X	X					X	X					X	X	X		
Honeycrisp	X			X	X	X									X				X	X	X	X				X	X
Liberty				X							X	X		X													
Macoun																					X					X	X
Melrose	X				X	X									X				X	X	X	X				X	X
North Pole				X							X	X		X				X									
Pristine				X							X	X		X													
Redlove Calypso			X	X	X	X	X	X	X	X	X	X		X		X	X						X	X	X		
Scarlet Sentinel				X							X	X		X			X										
Spartan																					X					X	X
Sunrise Magic®																					X					X	X
Urban® Columnar																					X					X	X
Williams' Pride				X	X	X	X	X	X	X	X	X		X		X	X						X	X	X		
Zestar				X	X	X	X	X	X	X	X	X		X		X	X						X	X	X		

Apple Pollination

Apples need to be pollinated by insects to set fruit. In much of the world honeybees are the most common apple pollinator. However, in the maritime Northwest orchard mason bees are often more reliable. See Sky's Orchard Mason Bee information sheet for how to promote healthy populations of these insects. NEVER spray your apples trees when they are in bloom—you can kill the bees whose pollination you rely on. In general, the bees need to transfer pollen between apples of **different varieties** to get cross-pollination and good fruit set. You can plant two different trees if you have room, or purchase a “combination” tree that has multiple varieties grafted onto one trunk.

There are several exceptions to this two-tree rule. First, most crabapples are self-fertile; many are excellent pollen donors for other apples. Second, some apple varieties produce sterile pollen. For the home orchardist, choosing a sterile variety means you may need to plant three different trees (or your sterile variety plus a combination tree or crabapple) to ensure they all produce fruit. Third, closely related varieties will not cross-pollinate. The new Cosmic Crisp® is a cross between Enterprise and Honeycrisp, so neither of its parents can be a pollination partner. Similarly, Alkmene and Karmijn de Sonnaville both have Cox Orange Pippin as a parent, so none of the three are good pollination partners for any of the others.

Finally, as different apple varieties bloom at slightly different times, you also want to choose varieties whose bloom times overlap. This can vary from year to year, but most springs the same varieties tend to bloom early or late. Climate differences, including winter chill and spring temperatures and rainfall, make a difference in both the timing and the order of apple blooming. Bloom time data, and therefore pollination recommendations, from very different climates such as the Midwest will not necessarily apply in the Puget Sound region. Sky Nursery uses bloom time data from the Mount Vernon Fruit Research Station, then from Raintree Nursery (located east of Centralia), then from Cox Orange Pippin (maritime Britain).

In the table below, varieties which produce sterile pollen are in bold and marked with a star.

Early Blooming	Early Midseason	Midseason Blooming	Late Blooming
Alkmene *Gravenstein Redlove Calypso William's Pride Zestar	Akane Early Pink Lady Empire Liberty Lodi McIntosh North Pole Pristine Scarlet Sentinel Wynooche Early Yellow Transparent Crabapples: Centennial, Dolgo, Firecracker, Whitney	Amere de Berthcourt *Ashmead's Kernel Braeburn Chehalis Cox Orange Pippin Crunch a Bunch Enterprise Golden Sentinel *Jonagold *Karmijn de Sonnaville Lubsk Queen Macoun Pixie Crunch Red Cascade Snow Sweet Sunrise Magic® “Urban” Columnars Winecrisp Crabapples: Evereste, Transcendent	Beni Shogun Fuji *Bramley Cosmic Crisp® Gala Granny Smith Honeycrisp *King (Tompkin's King) Melrose Spartan Most cider apples Crabapples: Adirondack, Golden Raindrops, Indian Summer, Snowdrift