

Open-Pollinated? Heirloom? Hybrid? What's the Difference?

Below is an excellent description explaining the differences between heritage, open pollinated, and hybrid seeds and why we want to have seeds saved in our own community (taken from the 'seed savers exchange' web site)

Open-pollination is when pollination occurs by insect, bird, wind, humans, or other natural mechanisms. Because there are no restrictions on the flow of pollen between individuals, open-pollinated plants are more genetically diverse. **This can cause a greater amount of variation within plant populations, which allows plants to slowly adapt to local growing conditions and climate year-to-year.** As long as pollen is not shared between different varieties within the same species, then the seed produced will remain true-to-type year after year.

An **heirloom** variety is a plant variety that has a history of being passed down within a family or community, similar to the generational sharing of heirloom jewelry or furniture. An heirloom variety must be open-pollinated, but not all open-pollinated plants are heirlooms. Heirloom seeds can be a variety that is more than 50 years old or simply one who has a well documented generational history of preserving and passing on the seed.

Hybridization is a controlled method of pollination in which the pollen of two different species or varieties is crossed by human intervention. Hybridization can occur naturally through random crosses, but commercially available hybridized seed, often labeled as F1, is deliberately created to breed a desired trait. The first generation of a hybridized plant cross also tends to grow better and produce higher yields than the parent varieties due to a phenomenon called 'hybrid vigor'. However, any seed produced by F1 plants is genetically unstable and cannot be saved for use in following years. Not only will the plants not be true-to-type, but they will be considerably less vigorous. Gardeners who use hybrid plant varieties must purchase new seed every year.

So what's it going to be—hybrid, open-pollinated, or heirloom varieties? While hybrids have their benefits, choosing open-pollinated varieties conserves the genetic diversity of garden vegetables and prevents the loss of unique varieties in the face of dwindling agricultural biodiversity. Furthermore, focusing on heirloom varieties creates a historical connection to gardening and food production, building a more sustainable future by carrying on our garden heritage. By choosing open-pollinated and heirloom varieties, you have the ability to help conserve biodiversity and to contribute to the stories behind our seeds.