

## Bean Varieties

As you can see by looking at the chart (reproduced from Seed to Seed by Suzanne Ashworth), there are many different kinds of beans. To make it even more confusing, many of the scientific names have more than one variety, especially for the common bean (*Phaseolus Vulgarius*). This really only matters to gardeners that want to save their own seed and want it to breed true. If you are not going to save your own seed, then you can plant multiple types of beans in your garden and not worry about cross-pollination.

<u>Genus</u>	<u>Species</u>	<u>Common Name</u>
Arachis	Hypogeal	peanut
Cajanus	Cajun	Pigeon pea
Canavalia	Ensiformis	Jack bean
	Gladiata	Sword bean
Cicer	Arietinum	Garbanzo (chick pea)
Cyamopsis	Tetragonobus	Cluster bean
Dolichnos	Lablab	Hyacinth bean
Glycine	Max	soybean
Lens	Culinaris	lentil
Lupinus	Mutabilis	tarwi
Pachyrhizus	Ahipa	ahipa
	Erosus	Jicama (yam bean)
	Tuberosa	Potato bean
Phaseolus	Acutifolius var. Latifolius	Tepary bean
	Coccineus	Runner bean
	Lunatus	Lima bean (butter bean)
	Vulgaris	Common bean
	Vulgaris subsp. Nunas	Nunas (popping Bean)
Pisum	Sativum	Garden pea, edible Podded pea
Psophocarpus	Tetragonolobus	Winged bean, Asparagus pea
Vicia	Fava	Fava bean (broad bean)
Vigna	Aconitifolia	Moth bean
	Angularis	Adzuki bean
	Mungo	Black gram
	Radiata	Mung bean (green gram)
	Umbellata	Rice bean
	Unguiculata	cowpea
	Unguiculata var. Sesquipedalis	Yard long bean (asparagus bean)

## Seed Saving

If you plant one bean variety from each of the Genus/Species, there is no problem with cross pollination. Within a Genus/Species, some bean varieties will cross pollinate. The obvious answer would be to make sure any bean varieties you choose are from separate Genus/Species. However, there does not appear to be a way to look up a bean variety and determine its Genus/Species. And you can't specify a Genus/Species and get a list of all the bean variety names. To make it worse, many seed catalogs are a bit careless on how they categorize beans. Most do list a number of beans under *Phaseolus vulgaris*, but then they also list some *Phaseolus vulgaris* under categories such as "pole beans" or "French beans" or some other commonly used category. In my limited research, they only appear to do that for *Phaseolus vulgaris*. So this is only a problem for the common bean. Of course, this is the type most people want to grow. For example, if you are thinking of planting a pole bean and a bush bean you may have a problem with cross pollination. Your best bet would be to refer to a book such as *Seed to Seed* by Suzanne Ashworth for guidance on cross pollination.

You could also separate your bean plantings by time. For example, if you grow a winter or very early spring garden, you could grow peas, fava beans, garbanzos and lentils, and reserve the summer garden for the other types of beans which prefer warmer weather.

## Dual and Triple Use of Beans

Many, but not all beans can be eaten in two or three forms. They can be eaten as a green or "snap" bean when the seeds are immature. Some beans can also be eaten as a shellie/shelly bean where you remove the seeds from the pod and eat only the bean. Some beans can also be eaten as a dried or "soup" bean where the seed is removed from the dried pod and only the bean is eaten.

There are exceptions to the above, and care should be taken when deciding how to eat a bean. For example, the Hyacinth bean and the Jack bean can be eaten as a green and shelly bean, but they are toxic as a dried bean. Some beans, such as the Fava or broad beans can be potentially fatal to males of Mediterranean ancestry (the result of an enzyme deficiency commonly called Favism).

## References:

### Books

*Seed to Seed* by Suzanne Ashworth, 1991, published by Seed Saver Publications, ISBN 0-9613977-7-2

*The Resilient Gardener* by Carol Deppe, 2010, published by Chelsea Green Publishing Company, ISBN978-1-60358-031-1

### Seed catalogs

Territorial Seed Company: 48 common bean, 3 soybeans, 1 cow pea, 2 yard long beans, 2 runner beans, and 3 favas

John Scheepers: 3 types of peas, no beans

Seed Savers Exchange: 30 common beans, 3 runner bean, 3 lima bean, and 3 soybean

Bountiful gardens: 14 common bean, 1 yard long, 2 cowpea, 2 favas, 1 chickpea, 1 lima bean, 1 moth bean, 1 runner bean, and 2 soybeans

Natural Gardening Company: 8 common bean, 1 fava bean, 1 lima bean, 1 soy bean, and 1 yard long bean

### **Websites**

UC Davis has a good website with general information on growing a large number of vegetables including beans: <http://cagardenweb.ucanr.edu/Vegetables/>

The University of Santa Cruz has a good website with general information on growing vegetables, nuts and fruit trees. They have a good general write-up for beans: [http://casfs.ucsc.edu/documents/for-the-gardener/bean\\_handout.pdf](http://casfs.ucsc.edu/documents/for-the-gardener/bean_handout.pdf)