

## **BEANS AS A POPULAR GARDEN CROP**

*Phaseolus vulgaris*

### **History:**

The snap bean and dry bean are just some of the cultivars of *P.vulgaris* which originated in Central and South America and can still be found in mountain regions growing wild. The bean was cultivated in ancient times – seeds were found in Peru dating back to 6,000 B.C. and Central Mexico dating to 4,000 B.C. Bean seeds were also found in New Mexico dating back to 300 B.C. In the 16<sup>th</sup> century, the Spanish conquistadors brought the bean to Europe.

Jack and the Beanstalk was my first introduction to the climbing or pole bean. My mother grew beans in her massive vegetable garden on the farm but they were bush beans. To a 10 year old the rows were long and endless and picking beans almost daily for eating fresh and freezing the surplus was a back breaking job. But the flavour of beans freshly picked, cooked and smothered in butter was well worth the effort. Now that I have my own garden, growing beans is a must. My garden space is limited so growing pole beans on a vertical structure is a practical choice. My favourite is the flat pod Romano Bean. Pole beans produce later than bush beans, but are more prolific in the long run. Beans are one of the most popular garden crops – they are easy to grow and highly nutritious. Dried beans are high in protein, fibre and B vitamins. Whole snap beans are a good source of vitamin A, iron and potassium. With numerous cultivars to choose from, there is one to suit any taste, climate or garden size.

### **SCARLET RUNNER     *Phaseolus coccineus***

Grows wild in the Mexican mountains where the flowers are pollinated by hummingbirds. Originally, the beans were taken from North America to Europe as decorative climbers in the ornamental garden rather than as a vegetable. Plant Scarlet Runner beans to make a quick screen in the garden. They will soon grow up to 10' tall. Grow them on tripods in the flower border or on a tepee to provide a shady hiding place for children to play on a hot summer's day. The flowers are a beautiful crimson and the bean pods make a tasty meal.

### **SNAP and DRIED BEAN     *Phaseolus vulgaris***

This bean can be grown as a climber as well as a bush type. The pods may be round or flat in colours of green, yellow and burgundy. For fresh beans, pick the pods frequently before the bean seeds, inside the pod, begin to swell. Botanically speaking, dry beans are indistinguishable from familiar bush snap beans, but these legumes are harvested later, after the seeds have matured. The best dry beans have large, firm seeds that retain their flavour and texture when cooked. For dry shelled beans, leave the pods on the plant until the plant's leaves drop off. Pull the plants and allow them to finish drying in a warm, dry, well ventilated place. Once the pods are dry, shell the beans and spread them out on clean window screens to air dry for 3 days then store in airtight containers. Great northern is an heirloom "navy bean" ideal for soups and baked beans. Brown speckled pinto beans are essential for traditional Mexican dishes.

### **CULTIVATION:**

Beans like a rich, light soil which can be neutral or slightly acidic. They do best in a sunny location. When a legume seed sprouts and starts to grow, the roots exude substances that attract the right strain of nitrogen-fixing bacteria. More roots mean stronger signals, so it is important to provide nutrients to support vigorous early growth when growing legumes. Before planting, work lots of compost into the soil as legumes fix nitrogen more efficiently when grown in compost-enriched soil. Bean seeds will not germinate in cool soil, so wait until the last spring frost has passed and the soil temperature has warmed. If you don't want all of your bush bean plants maturing at the same time stagger small plantings every 2-3 weeks for a continuous supply. Bush beans don't mind being a bit crowded, and they seem to grow best in double rows. Thin plants to 8" apart then apply a 4" layer of organic mulch to keep the soil cool and moist throughout the growing period and prevent mud from splashing on the plants. Provide sturdy support for the climbers and short twigged sticks to prop up bush varieties as they tend to get top heavy with bean pods. Be careful not to let the mulch touch the stems to prevent rot. After harvest is over, disease free bean plants can be ploughed back into the soil or composted to provide an excellent source of much needed nitrogen and organic matter.

### **DISEASES:**

Powdery mildew: A fungus that thrives in both dry and humid weather. It develops late in the season on mature plants and exhibits a powdery white growth over the upper surface of leaves. Leaves eventually turn yellow and dry out. Older leaves are usually first to be infected.

Viruses: Symptoms vary according to the type of virus, but most include streaking, mottling, puckering or curling of leaves. Most viruses are spread by sucking insects such as aphids or leafhoppers. Destroy any infected plants and control the insects that spread disease.

To prevent the spread of powdery mildew and viruses avoid working around bean plants when they are wet. Water plants early in the day so they will be dry by evening. Drive aphids away with a strong spray of water from a hose. Mexican bean beetles can be hand-picked and disposed of in all stages of growth, from clusters of orange eggs to spiny yellow larvae to mustard-yellow, black spotted adults.