

rubbish. Another method is to fill a paper sack ¼ full, lay it on the ground and tread lightly back and forth crushing the pods. For bulk* quantities a seed thresher is used to deal with larger quantities.

Grading: Small and cracked seeds can easily be sorted by hand. When growing larger seed quantities SHS* can help to facilitate bulk cleaning and grading.

Once seeds have been cleaned and graded they should be stored in paper bags and labelled well. There is 1 seed pr gram and seed yield vary from 60 – 90 grams pr square meter.



For more in detail information see also: The Organic Seed Grower by John Navazio. ISBN 978-1-933392-77-6

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www.open-pollinated-seeds.org.uk

Growing Runner Beans for seed



Runner Beans: *Phaseolus coccineus*. Runner beans have their origin in Mexico and the central Americas and have been known as a food crop for well over 2000 years. They have a mention in a 17th century publication to have been grown as ornamental plants in England. Today runner beans with their impressive colourful flowers are an invaluable and much loved garden crop. There are also a number of string less varieties available on the market and it is a crop which many enjoy to save for harvesting seeds. A reflection of this can be seen by the many home grown varieties which are swapped up and down the country at the UK's annual February and March seed swaps.

Flower biology: Runner beans are perfect flowers which carry stigmas and pollen in the same flower. Flower colour varies from scarlet red to white and a pink and white like the Pink Lady.

Pollination: Runner bean flowers are self-fertile but need insects to trip (release) the pollen and rupture the stigma to grow the pod and set seeds. They will quite readily cross pollinate with other runner beans and one should look upon them as semi cross pollinators.

In the wild they are perennial since their bulbous roots will grow biannually if unharmed by frost. Their roots can be dug up after harvest and stored moist over winter and replanted in spring. However in our climate we tend to treat them as annuals since we usually sow them afresh each season.

Isolation distance. Although beans are self fertile they can cross pollinate up to 40% and therefore they need a minimum distance of 150 - 200 meters between two or more varieties with other flowering crops growing between them.

Minimum number of plants. It is important to maintain the genetic diversity of the different traits of runner beans always keeping an eye on the individual plants. Since growing a bean crop usually involves more than 30 plants this number is easily sufficient to maintain genetic diversity as the bean flowers are self pollinated.

Crop characteristics: There are quite a number of different runner bean varieties on the market and although the beans will produce true to type plants it is nevertheless important to recognise

what individual traits the crop is known for. Something quite obvious is the flower and seed colour. Also selecting for string less ness is required if a variety is known for this characteristic.

Agronomy. Good seed depend on good crop production and good crop production depends on suitable soil and soil preparation. Beans like compost and moisture and will respond well to evening watering in the form of a gentle shower. This will also help to set more flowers.

Positive selection: It is possible to positive select for the best performing plants. When growing one plant pr cane or string it is easy to look more carefully for characteristics at single plants. Mark with coloured labels the plants you wish to save seed from and make sure no one else will harvest them for culinary purposes.

Keep the seed separate from the remaining seed which you will harvest and **label clearly** your selected seeds and **store dry**. Remember that seeds are mostly dry matter and will need equivalent dry storage. The specially selected seeds are **elite seeds**.

Crop support: The crop needs support with canes or string as suits the grower and the planting can be 25 – 30 cm between plants in the row and 90 cm between rows.

Rouging: Any plants which fail to grow well, are slow to get going or which look weak or are aphid insect infested should be pulled out and discarded **before flowering**. This is called rouging.

Flowering and Seed harvest: During June and July the crop will continue to flower, with the first seeds maturing from the bottom up. The first seed harvest can start in late August depending on location, with manual harvesting taking place over several weeks. An indication of seed maturity can be seen by pods turning brown. Lay the seed pods to dry on drying frames.



Threshing: Once seed pods have dried the seeds can to be threshed. This can be done by hand wearing gloves and crunching the pods in a large tub. On a windy day the crushed pods and seeds can be winnowed by pouring the material into a second tub allowing the wind to blow away the