



Grains of multiple shapes and colors
Radio Marš
Slovenia

During the International Year of Pulses, Seed Guardians set off for the mysterious world of large group of garden crops – pulses. Considering the fact that pulses have been in our diet for a long time (they appeared in the Slovenia region in the 17th century), we joined forces with the generation of our grandparents and set off on a real garden journey of knowledge of pulses in Slovenia.

Pulses belong to a family that can be easily recognized by a pod, made of two shells or peels. The grains remain, after the green part dries out. They belong to the genera Fables, which also includes the most extensive and nutritionally most important family of legumes (Fabaceae). Plants from this order are easily recognized by their distinctive flower shape that resembles a butterfly. Pulses are important source of plant based proteins. They are also one of the plants that exhaust the ground only a little. Even though they get nutrients from the ground, they give nitrogen in return. Tuberos bacteria that collect and bind nitrogen are harbored in the root nodules, therefore the plants are at the same time green fertilizers for the garden.

In our area the most common pulses are beans and peas. A little less often we decide do sow soybeans, broad beans, lentils and chickpeas. But this was not always the case. Pulses were in past very important part of nutrition. In the end of the 17th century in Carniola, at least two different sorts of beans, which joined broad beans, lentils and peas on the menu, were known. The sources quote that broad beans and lentils were dominant, whereas chickpeas and peas slowly began to withdraw at the time. Nowadays we prefer to sow and consume beans. Furthermore, the testimonies of our ancestors claim the same. It was impossible to find a garden without any old sort of beans in the past decades.

The history of bean dates back to South America, where Indians sowed it together with Indian hemp, corn and squash. Back then it was preferably consumed dry, moreover leafs of plants were also popular. In Europe, bean was mentioned for the first time in 1542, where it was brought from America by sailors. But in the 16th century it did not get a good reputation, because Catherine de Medici characterized it as a food for peasants, since they were a substitute for meat, which could not be afforded by the lower classes. Like other pulses, we began its production in the 17th century in Slovenia region. Legend says that St. Simon declined meat and wished for a plate of beans for his last dish on his deathbed. This is why in medieval times beans were called “meat of the poor”. In Prekmurje region and White Carniola are many customs and traditions in conjunction with beans. For example, beans, cooked in milk or water without lard are a simple Lenten dish in many places.

All species of beans are part of the legume family. The most widely cultivated sort of one-year herbaceous beans is a *Phaseolus vulgaris*. Roots of a bean penetrate more than 1 meter deep in the soil and have a stem called vine. The colours of flowers are mostly white, yellow, red, and purple or light roseate. Bean pods are in yellow, green, or motely colour with or without strings. The most common types of beans are bush and pole beans; the latter are also known as “preklar” (*Phaseolus vulgaris* var. *communis*).

Bean grows best in loose soil that contains humus. Soil should not be fertilized with barn manure, but a small amount of mature home compost can be added. Pole beans are sown outdoors from May to the end of June. Bush beans are sown from the beginning of April to the end of the August. When planting seeds, the distance between different types of pole beans should be around 90cm; and the distance between plants in a row should be around 50cm. With bush beans, the recommended distance between different types is 50 cm, while the distance between plants should be around 10 cm. We harvest bean in pods (green beans) regularly, but shelling beans when beans are dry. In rotational crops, beans are a part of the third parcel.

Beans are nowadays irreplaceable group of vegetables. Among garden vegetables, dry beans have a very high energy value, because 100g contains more than 300 calories. This value is mostly consisted of carbohydrates, which present 55 percent of all components in shelling beans. It is recommended to soak shelling beans in cold water and cook them very slowly to retain nutritional value. Bean contains iron, magnesium, zinc, copper, phosphorus, potassium, manganese, calcium, selenium and various vitamins. These components are a direct food for intestinal bacteria; bean consumption positively effects on our health. We protect our bodies from many chronic diseases by regular bean consumption. This can reduce risks of cancer diseases and heart diseases. Surprisingly, it also protects from obesity. By bean consumption, we reduce the repetition of heart strokes, and cancerous changes in intestine. Bean also helps in problems with livers, kidneys, and bladder and quickens the synthesis of amino acids, stimulates, helps in digestive problems and drains water from the body.

Bean is recommended for patients with diabetes, because it contains complex carbohydrates, that are slowly released in blood, thus bean is ideal for sugar regulation. Beans and pulses are also nutritional basic for vegetarians, since they are available through whole year. Thus we store beans dry, frozen or preserved. It is never recommended to eat raw beans, since this can lead to allergies.

Events, dedicated to beans and preparation of the most interesting dishes consisted of beans, show, how important they are in Slovenia. From discussions with elderly from our surroundings we concluded that our grandparents preferred Slovenian traditional dish “matevž”. Bogataj (2008) explains that dish is typical of central Slovenia, especially Lower Carniola. At first, it was typical of poor environment, but later it gained a character of delicious puréed side dish for bourgeois, made of potatoes and beans. Beside expression “matevž”, the dish is also known as “krompirjev mož” (“potato man”), “medved” (“bear”) or “belokranjski matevž” (“Carniolan matevž”). To prepare “matevž” we have to soak beans in water the night before the use. The next day the water is poured out and the beans are cooked in salted water, together with bay leaf and parsley roots. Separately we cook and then drain salted potatoes and lard them with butter and cream. In the end, cooked beans and larded potatoes are mixed together in a puree.

In order to eat more varied food, we received a few advices how to use beans more often in the coming summer months. Freshly picked pods are recognized by loud snap and full pods. If the pod is freshly picked, it will snap in two rather than bend. Grandmothers advise to harvest the Slovene autochthonous type "ptujski maslenec", which originates near Dravsko polje. The pod of this sort is colored yellow, while beans are dark purple. Preparation of bean in pods is quite simple. We should, if needed, wash pods before cooking and cut stalks. Furthermore, we need to remove strings in string beans. The easiest way to do this is to blanch beans for few minutes in boiling water. Pods are then cleaned and cooked in steam or boiling water. Those who cook beans in boiling water have to be particularly careful not to overcook them. It is recommended to cook beans between 5 to 12 minutes in an open pot. People from Slovenian Lower Carniola or White Carniola lard them with butter and curdled milk, while those from Slovenian Styria or Prekmurje region lard it with minced lard or greaves and cream, sometimes also with breadcrumbs browned in butter.

We are far too unaware of the fact that a reduction in the variety of crops, which our predecessors so carefully grew and protected for so many years, is endangering our natural heritage as well. Together with the loss of these plants much of our traditional knowledge has also disappeared, and this is knowledge that had been passed on from generation to generation.

We produce, preserve, and exchange seeds. The future is in our hands!

"This segment is part of an audio series highlighting the importance of Communication as a major tool for Development. It was produced with the support of the World Association of Community Broadcasters and the Food and Agriculture Organization of the United Nations."