

Pepper – a traditional crop for Bulgaria

Author(s): проф. д-р Стойка Машева, ИЗК "Марица" Пловдив

Date: 24.05.2016 *Issue:* 5/2016



Pepper ranks fifth among vegetables worldwide in terms of production and cultivated area, and in our country – second after potatoes. Its importance for humans is due to the valuable nutritional and taste qualities of its fruits, which are a source of vitamins, organic acids, sugars, the alkaloid capsaicin, which is “responsible” for the pungency of some pepper cultivars, and essential and vegetable oil – oleoresin.

They are also rich in vitamins C, P, A, B, E, polyphenols, carotenoids and sugars. Pepper cultivars are divided into two groups – sweet and hot. In terms of vitamin C content, sweet peppers exceed lemons and oranges and all other vegetables by 4–5 times. They contain more sugars and less capsaicin than hot peppers. Pepper fruits also contain many pigments – lycopene, carotene, rutin, etc., which have a pronounced antioxidant effect. Lycopene ranges from 0.18 to 0.36 mg/% –

depending on the cultivar. A single green pepper can provide up to 8% of the recommended daily intake of vitamin A, 180% of vitamin C, 2% of calcium and 2% of iron.

Pepper originates from Central and South America – Guatemala and Mexico. The indigenous peoples of tropical America have cultivated it since ancient times. Even today it is found in its native land as a perennial semi-shrub in the wild. It is considered that Peru is the country where the greatest diversity of peppers is cultivated, and Bolivia is regarded as the country where the greatest diversity of fruits from wild peppers is consumed. In Europe pepper was introduced by Christopher Columbus and quickly spread across the continent, and it came to Bulgaria in the 16th century.

The genus *Capsicum* includes 20–27 species. Of these, 5 are cultivated species. Its fruits vary significantly in colour, shape and size, both among species and within a single species, which has led to confusion in the relationships between taxa. Through chemosystematic studies, distinctions between cultivars and species have been made. Among cultivated plants, pepper is unsurpassed in the variation of varietal traits, which are strongly influenced by the conditions of its cultivation. Our country is also known for the diversity of local forms and developed cultivars. This is related to the favourable conditions for its development, the accumulated experience of vegetable growers in its cultivation and the preferences of consumers, determined by the high biological value of the fruits. The main groups of peppers are large-fruited, small-fruited and bouquet types. Large-fruited peppers are divided into broad and long peppers. The small-fruited representatives are mainly hot peppers, and the bouquet types – peppers for grinding. Depending on the vegetation period, cultivars are divided into early, medium-early and late.

Pepper is invariably present on the Bulgarian table, both fresh and processed. Raw or roasted, its fruits are used in the preparation of salads, many dishes and canned products (roasted, pickled, juices, purées, lyutenitsa, pickles). It is used in medicine as a means of stimulating the appetite, improving digestion, treating anaemia, hypovitaminosis, etc., and its bactericidal effect inhibits the development of microorganisms. Hot peppers are also used for medicinal purposes. In pharmaceuticals, capsaicin is used to prepare ointments and plasters applied in cases of sciatica, radiculitis and gout.

The largest producer of pepper is China, followed by Mexico, Indonesia, Turkey and Spain. The largest exporter of pepper to the EU is Spain. In 2013 it exported 518 thousand tonnes. This represents 46% of the EU's pepper imports. The largest importer of pepper in the EU is Germany. In the same year it imported 337 thousand tonnes.

In our country pepper is grown mainly in the open field. Cultivars for fresh consumption and for processing are planted in the field. In greenhouses, cultivars for fresh consumption and for stuffing are mainly represented. In the structure of greenhouse production, pepper ranks third together with strawberries – 10–20% of the areas. For open-field areas, significant variation is observed over the years. In 2014 the areas under pepper were 3 times smaller compared to 2006. Pepper

has a significant share in vegetable exports. Traditional markets are the Czech Republic, Germany, Austria, Romania.

The largest importers of vegetables, including pepper, to Bulgaria are Turkey, North Macedonia, Greece, Spain, the Netherlands and others. The data from the table show that with regard to pepper the balance is negative, in favour of imports. We import mainly greenhouse-grown peppers, and at the end of summer – small quantities for the needs of the processing industry.