

# Attempt to Revive Bulgarian Peanut Production

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Peanuts are a relatively new crop for Bulgaria. They originate from South America, are extremely thermophilic and are widely grown worldwide in countries with tropical and subtropical climates. In Bulgaria they were first sown by Angel Dimchov in the village of Kurtovo Konare in 1896. They soon spread to the Sadovo area as well, and the first scientific research on this crop was carried out by Konstantin Malkov, the founder and patron of the Institute of Plant Genetic Resources. It was established that the soil and climatic conditions in the Sadovo region are the most suitable for growing peanuts, which require light, sandy and necessarily irrigated soils. They have also gained partial distribution in the Petrich region, and for personal needs they are grown throughout the country. At IPGR Sadovo, breeding and agrotechnology work on peanuts has also been carried out since the beginning of the last century. At the end of the 20th century, the early-maturing varieties 26-09, Kalina, Kremena and others were developed here, which were very well accepted by Bulgarians, and at every market one could

see signs reading “Sadovo peanut”. At that time, the areas under this crop exceeded 100,000 da. After the political changes in 1989, large-scale imports of peanuts at very low prices began, which collapsed Bulgarian production, remaining to some extent only in the area of the town of Sadovo.

Until recently it was considered that Bulgaria was the northern boundary of this valuable and interesting crop, and our country was the main producer in Europe. With climate change and several warmer summers in Western Europe, interest in peanuts increased and in recent years seeds of our varieties for testing and production have been sold in Austria, Germany, Switzerland, Hungary, Ukraine, Portugal, France, and in Italy they are already permanently established.

Peanuts are a legume crop which, in addition to their valuable nutritional qualities, are renowned as an excellent preceding crop, and within European programmes they also receive additional funding in the form of a subsidy for the cultivation of protein crops. Two types of peanuts are widely distributed in the world. The Virginia type, which is characterised by a long vegetation period, high yields, a spreading growth habit, uniform arrangement of the pods and larger kernels. These are also the most widely grown in the world. The other type is Valencia, to which the Bulgarian varieties belong. They are characterised by earliness, which allows them to be grown in more northern regions, an erect plant habit, compact arrangement of the pods and, above all, significantly better taste qualities. The Sadovo peanuts are distinguished by a very short vegetation period and excellent disease resistance, and with the newest varieties they have significantly increased their productivity and kernel size. One of the biggest problems with this crop – manual labour and high production cost – is gradually being solved, as all operations in their cultivation are now fully mechanised. Another problem with this crop in our country remains the large imports, unfortunately, of relatively low-quality peanuts from China, Argentina and some African countries at low prices. They are used mainly in the processing industry for wafers and other products coated with chocolate, where the quality of the raw material is not of primary importance.

From a scientific point of view, work on this crop in our country, and it can be said in Europe as well, is carried out only at IPGR Sadovo and, in recent years, also in the private company “Seed House Sadovo”. Love for peanuts and the desire for their prosperity united their efforts and on 21.09.2021 they organised the first “Open Day of the Sadovo Peanut” in Bulgaria. Many producers, processors and journalists were invited. The main goal of the event was to familiarise farmers with the potential of this crop, its advantages, its valuable qualities, the breeding achievements and, above all, the introduction of machinery in its cultivation. The forum was opened by Assoc. Prof. Katya Uzundzhaliyeva – Director of IPGR Sadovo, and greetings were delivered by Svetlozar Dragushev – Manager of Seed House Sadovo and Prof. Martin Banov – President of the Agricultural Academy. This was followed by a visit to the seed production plot of the variety Lotus created at the seed house. This

variety is known to provide high yields while having the most modest leaf mass. A demonstration of mechanised lifting of peanuts from the soil was also carried out, which aroused great interest among those present, who knew that this process until a few years ago was entirely manual, very labour-intensive and increased production costs. The research fields with peanuts at IPGR Sadovo were also visited. There Assoc. Prof. Stanislav Stamatov presented to those present the varieties Kremena, Orpheus, Kalina and Tsvetelina.

The variety Kremena is the national standard, known for its high resistance to diseases, the predominance of pods with two kernels of wine-red colour without marbling on them and a high yield potential. It is extremely suitable for industrial roasting on a line due to the high uniformity of the seeds. The variety Orpheus is the only Bulgarian variety with a light kernel colour, known in the international classification as “pink” colour. It stands out with a large kernel, very pleasant taste and high vitamin E content. The variety Kalina is the most popular variety in Bulgaria. It has pods with 1, 2, 3 and even 4 and 5 kernels, a limited percentage of which have the typical marbling (cracking of the seed coat) characteristic only of Bulgarian varieties in world breeding. The variety Tsvetelina is our earliest-maturing variety, distinguished by a very large, bright red kernel and a high percentage of seed coat cracking. The newest candidate variety Adata was also presented, which is currently under official variety testing at the Executive Agency for Variety Testing, Approbation and Seed Control and on which great hopes are placed.

The mounted peanut combine was also shown, with which, after the pods have dried to 11–12% moisture, they are harvested mechanically, thus completely eliminating manual labour for this crop. During the field discussion, numerous questions were asked, both about the agrotechnology of peanuts and about the interest in this crop on the part of producers and traders, to which they received competent answers from the specialists. The issue of the new sesame varieties suitable for mechanised cultivation was also briefly discussed. The Open Day concluded with a discussion of the possibilities for increasing the areas under these valuable crops and a tasting of different peanut varieties.