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GARLIC CULTURE – PROBLEMS AND SOLUTIONS

BOTNARI Vasile*, https://orcid.org/0000-0002-0470-0384
CHILINCIUC Alexei, https://orcid.org/0009-0006-9510-5463

Moldova State University, Institute of Genetics Physiology and Plant Protection, Chisinau, Republic of Moldova,
**Corresponding e-mail: vasile.botnari@sti.usm.md*

The climatic conditions in our country are favorable for the cultivation of various species of vegetable plants, including garlic. Although, in accordance with the annual export quota to the European Community granted to the Republic of Moldova in the amount of 500 tons, in recent years, for the first time, only 10 tons of unknown varieties and origin were exported. At the same time, to meet the needs of the domestic market, approximately 90% of garlic consumption was imported.

According to statistical data, local garlic production is approximately 90 tons, which constitutes slightly more than 10% of domestic consumption. Annual imports reach 800 tons, an action devoid of economic rationale, since the climatic conditions in our country are favorable for garlic cultivation. Under current socio-economic conditions, the value of possible harvests obtained from the cultivation of one hectare of garlic, as well as other vegetables, at comparable costs, is equivalent to the value of production obtained from 50-60 hectares of cereal crops.

However, in the structure of sowing, the areas with cereal crops occupy over 300-330 thousand hectares, which significantly reduces the socio-economic potential of the agricultural sector. The expansion of field crops to the detriment of vegetable crops leads to an increase in the gap in local agricultural production, causing a disadvantageous imbalance in food security. Thus, in a relatively short period of time, the Republic of Moldova has transformed from a regional exporter of vegetables into a stable importer of them (100-120 thousand tons annually). Revitalizing the situation is currently becoming problematic, because in recent decades, research on vegetable crops has been of an occasional nature. The lack of scientific assistance in the field of vegetable growing tangentially contributes to covering the needs of the domestic market with imported production, often of dubious quality, thus contributing to the increase in the gap between import and export of vegetable production, which, according to statistical data for 2025, exceeds 112 million SUA dollars.

Traditionally, garlic cultivation is predominantly applied on individual plots. It is cultivated partially and semi-industrially on sectors of about. 2-3 hectares. How-

ever, in most cases the yields are low, 2,5-3,5 t/ha. Low and unstable productivity is also explained by the lack of planting material, as well as cultivation technologies for different production conditions. Importing garlic from other geographical areas to ensure food consumption cannot serve as planting material and does not guarantee obtaining competitive and quality productions.

The variety of local forms of garlic is impressive, but poorly studied. In order to elucidate the problems that limit the development of the crop, investigations were carried out including genotypes with and without floral stems, and the performing genotypes were selected and evaluated in pre-competitive tests. As a result, new varieties of garlic were created and approved, such as: Vitasan, Berechet, Moldobella and Teodor, with high productivity and increased resistance to the variability of climatic conditions. Their implementation ensures the obtaining, under different production conditions, of 8-12 t/ha of bulbs and a benefit that considerably exceeds the agricultural crops practiced on a large scale in recent times.

Keywords: Agricultural crops, vegetables, garlic benefit.

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