

**CULTIVATION OF PEANUTS AND PRIMARY PROCESSING OF THEIR PODS****Khudayberdiyev Tokhirjon Latifovich**PhD in Technical Sciences, Associate Professor,  
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**Annotation:** This article provides a detailed analysis of the cultivation of peanuts and the initial processing of their pods. It examines methods for increasing peanut yield, sowing technology from seed, cultivation practices adapted to soil and climatic conditions, irrigation and fertilization regimes, as well as post-harvest preparation of pods and primary processing operations. The paper is intended to be useful for peanut growers, agricultural specialists, and entrepreneurs, offering recommendations aimed at obtaining higher yields and improving product quality.

**Keywords:** Peanut cultivation, seed sowing, crop management, irrigation, fertilization, pod processing, yield, agricultural technologies.

Peanut (*Arachis hypogaea*) is cultivated worldwide as an important food and industrial crop. Its seeds and oil are widely used not only in food products, but also in the production of oil derivatives, margarine, canned goods, and various industrial sectors. Efficient cultivation and proper application of post-harvest processing technologies are essential conditions for increasing yield, improving product quality, and ensuring economic efficiency. In addition, selecting high-quality seed varieties and applying soil-specific cultivation practices significantly influence overall productivity. Modern agricultural innovations, such as improved irrigation systems and integrated pest management, further enhance the sustainability of peanut production. Therefore, it is necessary to study, on a scientific basis, all processes from peanut sowing to the initial processing of its pods and to develop appropriate recommendations.

**1. Peanut Cultivation Technology**

Soil preparation, seed selection, and pre-treatment of seeds are considered essential steps before planting peanuts. The composition and fertility of the soil have a direct impact on yield. For optimal productivity, planting is recommended in well-drained soils enriched with a mixture of sand and sandy loam. Seeds must be healthy, large, and free from disease, and they should be disinfected prior to sowing.

Peanut seeds are typically sown in spring or when the soil temperature reaches 15–18°C. Irrigation and fertilization practices significantly influence yield. Organic fertilizers and mixtures of nitrogen, phosphorus, and potassium stimulate peanut growth. In addition, weed control and protection against pests play an important role in improving crop quality.

**2. Post-Harvest Processing (Pod Preparation)**

Peanut harvesting is carried out based on the maturity of the crop. After the harvest, the peanuts are transported to the processing area, where the initial processing stage begins. During this stage, the product is cleaned, and dust, soil, and other foreign materials are removed.

Subsequently, the seeds undergo drying, sorting, and preparation for storage. In pod processing, particular attention is given to preserving product quality and preventing spoilage and pest infestation.

### 3. Modern Technologies in Pod Processing

With the help of modern technologies, peanuts can be cleaned, dried, and sorted rapidly and efficiently. Mechanized methods reduce labor costs and improve product quality. Furthermore, adherence to hygiene and sanitary standards during the initial processing stage extends the storage life of the product. Advanced monitoring systems also allow for precise control of moisture levels during drying, thereby preventing mold development. Moreover, automated sorting technologies contribute to higher grading accuracy and overall product uniformity.

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