



## Selection of Early, Fruitful Varieties of Asparagus

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**Abstract:** In this article, the implications of preliminary scientific research on the selection of the fertile assortments and hybrids adapted to the central climatic conditions of our republic, perennial plant asparagus (*Asparagus officinalis*. L), which is unfamiliar to the population of the republic and has high nutritional and medicinal properties, are described.

**Keywords:** Asparagus, rhizomes, young stems, variety, hybrid, yield, seed, seedling, cultivation periods.

### Introduction

Asparagus is viewed as quite possibly of the trendiest vegetable on the planet, and its utilization by the populace is expanding gradually year by year. As per East Organic product, developing asparagus lettuce is right now truly beneficial for both consumers and producers. The interest in asparagus is particularly high in the nations of Eastern Europe, where it is sold at costs 2-3 times higher than in different nations of the European Community. Regardless of the way that this vegetable is a harvest, it is viewed as a restorative plant in numerous nations. It is utilized in blood pressure problems, to decrease high blood pressure, to grow heart tissue and to forestall weakness. Since asparagus is valuable in eliminating unsafe substances from the body, forestalling kidney illnesses, heart sicknesses, kidney sicknesses and different diseases can be treated with the utilization of asparagus. The primary justification for its restorative properties is that it contains nutrients, microelements and a ton of folic acid. Asparagus additionally assists with working on the immune system and eye vision of individuals.

Asparagus is utilized in cooking, both boiled and smoked, and in the planning of soups and side dishes. Asparagus is costly not just in its high taste. Since it is a fantasy vegetable, it permits to give the populace green vegetables for quite a while. Asparagus was known to the old Romans and Greeks. This vegetable yield was first filled in France in the fifteenth sixteenth hundreds of years and spread to other European nations from that point. As of now, asparagus plant is generally developed in Western Europe and particularly in France. Asparagus can be tracked down wild in European and Asian areas. This vegetable yield can be developed from the southern locales of Russia toward the northern areas. Due to the fact that it is a cold-resistant plant it can be grown in cold fields too. Asparagus contains numerous nutrients: A, B<sub>1</sub>, B<sub>2</sub>, C, PP, mineral salts and asparagine substances with sulfur. Likewise, 100 g of dry asparagus contains 18 mg of calcium, 53 mg of phosphorus, and 0.8 mg of iron. Asparagus is a dioecious plant having a place with the bulbous family. The plant has a rich underground root growth that gathers a ton of supplements. From the thick roots, slender tubers seem consistently. Stems 1.5-2.0 cm thick show up on most buds on the root. These stems are utilized as vegetable produce when youthful. Since the growing stems are under the dirt, they are white in variety, and for this reason, asparagus ought to be sanded. An asparagus plant has two sorts

of plants, male and female. The stems of its blossoms are parted (expanded) and the seeds are little, light blue in variety. It is known that as of now, various measures are being executed in our republic to guarantee food handling and to build the range of vegetable harvests. Asparagus is a new and modern kind of yield for individuals of Uzbekistan. Yet, it has high nourishing therapeutic properties. As needs be, we meant to concentrate on certain components of asparagus development innovation in the focal soil environment of Uzbekistan.

**Conditions and strategies of experiment.** Research on the above point was completed at the Department of Fruit, Vegetable and Viticulture of Tashkent State Agrarian University, and field tests were directed at the University's instructive and exploratory station in 2022-2023. The climatic states of the exploratory site relate to the focal climatic states of Uzbekistan, and are recognized by their sharp continentality, the change from consistently cool winter to warm blustery spring, and the progress from warm spring to blistering dry summer. Field tests comprised of recently watered dim soils. In the tests, phenological perceptions, biometric estimations, and computations for deciding how much the collect were done. Additionally, the nature of the not set in stone and the financial proficiency of its still up in the air.

**Results of experiment.** Crops suggested for establishing an in the area of the Republic of Uzbekistan. Asparagus assortments and mixtures are right now excluded from "State registry ". Since this harvest isn't filled in that frame of mind of our republic. In our trials, asparagus Urojaynaya 6, Precoce D'Argenteuil Asparagus having a place with Russian determination, as well as Depaoli and Millenium cross breeds imported from abroad were experimented in the states of Tashkent territory. Establishing plan 110 cm x 30 cm. Considering the extremely late germination of asparagus seeds, we arranged seedlings of asparagus assortments in nurseries utilizing different soil blends. Asparagus assortments are absorbed warm water at 35-40 C for 2 days prior to planting them in soil blends. During the time of seed germination, the temperature in the nursery was kept up with at the very least 25 C. It was found in the estimations that the hour of germination of seeds in the tried soil blends is unique. From the tried soil blends, the seeds developed in bio humus + vermiculite in 11-12 days, the earliest. It was shown that quality boundaries of arranged seedlings were higher in bio humus + vermiculite. 6 leaves were shaped in them, and the heaviness of the seedling was 6-9 grams higher than in different techniques. (Table 1).

### Quality marks of asparagus seedlings. (30 days) (2022-2023)

Table 1

| Types of soil mixtures                         | Seedling age/ day | Number of leaves piece | Length from root neck to last leaf | Weight of each seedling, gr |
|--|-------------------|------------------------|------------------------------------|-----------------------------|
| Humus soil 50% + grass soil 40%+ rice husk 10% | 30                | 5                      | 10                                 | 28                          |
| Bio humus 80% + vermiculite 20%                | 30                | 6                      | 13                                 | 34                          |

In our examination, 4 assortments of asparagus, their crossovers were experimented for early aging and efficiency. Among the tried assortments, the prevalence of the Millenium assortment over different assortments as far as the quantity of stems shaped, their weight, and the yield acquired by 1 was uncovered. (Table 2)

### Productivity of experimented varieties of asparagus (2022-2023)

Table 2

| Variety, hybrids | Number of stems in | Weight of stems in | Average |
|------------------|--------------------|--------------------|---------|
|------------------|--------------------|--------------------|---------|

|                                   | plants (piece) | each plant (kg) | harvest t/ha |
|-----------------------------------|----------------|-----------------|--------------|
| Urojaynaya 6                      | 4              | 0.06            | 4.2          |
| DePaoli                           | 6              | 0.07            | 3.5          |
| Millennium                        | 8              | 0.1             | 6.4          |
| Precoce D'Argenteuil<br>Asparagus | 5              | 0.08            | 4.8          |

According to the given table, contrasted with other varieties of asparagus, the Millenium mixture has the highest return of 1.6-2.9 t/ha.

### Conclusions

1. While developing asparagus, it is much more productive way to establish 30-day-old seedlings arranged in bio humus + vermiculite, which gives a good quantity of harvest.
2. Taking into consideration of the late germination of asparagus seeds, preserving them in warm water at 25°C for 2 days prior to planting gives great outcomes for their growth.
3. Establishing Millenium, Depaoli hybrids of asparagus imported from abroad in central climatic states of Uzbekistan guarantees high perspectives of the plant.
4. Finally, it has been found that there are potential chances to develop asparagus with high wholesome and restorative properties in focal soil-climatic circumstances.

### The list of used literature

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