

## SPECIES OF THE LAMIACEAE FAMILY WITH SPICE PROPERTIES.

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**Abstract:** Some types of spice plants in the flora of Uzbekistan have been added to food or directly consumed by the people for several hundred years. Abu Ali ibn Sina insisted on eating more vegetables, various greens and plant products to avoid getting various diseases and treated hundreds of diseases with herbal medicines.

**Keywords:** spices, essential oil, lamiaceae family, leaves, *Dracocephalum integrifolium* bge, *Thymus seravschanicus* Klok, *Ziziphora pedicellata* Pazijetved.

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Some types of spices in the flora of Uzbekistan have been added to food or directly consumed by the people for several centuries. Abu Ali ibn Sina emphasized the consumption of more vegetables, various greens, and plant products in order to avoid various diseases, and he treated hundreds of diseases with herbal medicines. It is known that leaves, stems, flowers, seeds, roots and bulbs of plants are used to flavor any food. First of all, it tastes good and allows a person to eat with appetite, and secondly, it provides him with various vitamins, glycosides, tannins, essential oils, organic acids, and mineral salts contained in plants. These substances play a major role in the quick and easy digestion of food, in its rapid absorption into the human body, in the treatment of various diseases, and in the improvement of metabolism in the human body in general. Some spices (pepper, horseradish, garlic) have bactericidal and antioxidant properties. Therefore, prepared foods can be stored for a long time using them. During this period, they do not allow the growth of microorganisms in the food (perhaps they kill them and do not allow them to reveal fats). Taking into account the above-mentioned properties of such plants, they can be widely used in the food industry in the preparation of various preserves, in the production of sweets and in cooking. As each plant is added to food or eaten directly, it is necessary to know at what time it is rich in substances necessary for the human body. Some plants - mint, cilantro, basil, chives, mostly leaves are eaten as they are and dried during the harvest season. The seeds of some plants (cumin, dill, dill, etc.) are eaten. The fruits of many plants, such as pepper and sorghum, are eaten. Therefore, the leaves of plants whose leaves are used are harvested before flowering. The fruits of some

plants are harvested in large numbers during the period when they are rich in vitamins, organic and mineral substances. Also, the seeds of edible plants are harvested when they are fully ripe. Sharp knives and scythes are used for harvesting. Otherwise, the quality of the product will deteriorate and the plant will dry up.

For example, in the mountainous regions of Kashkadarya region, cumin seeds are harvested by hand and plowed with a hoe when they are not ripe. This situation leads to the disappearance of cumin growing areas. Most edible plants can be harvested two or three times. Every time a plant is cut, it is not good to cut it too low. Otherwise, the growing point of the root, buds will be damaged. If the herbs are dried, then they are dried in the shade, because when dried in the sun, firstly, the plant loses its green color, and secondly, the essential oils evaporate quickly. Also, vitamins, organic substances and mineral salts, as well as various acids, break down and lose their original properties. After drying, the product is stored in a dry place. For this, the heat temperature of the houses where spices are stored should not exceed 16-20 degrees. Each type of herbal product should be stored separately in glass, porcelain, ceramic containers or plastic bags in airtight containers at home on shelves or in cabinets. . It is necessary to say that containers with spices are monitored from time to time. If the walls of the containers sweat, it means that the spices are not dried enough. In such cases, they should be dried again. In general, the moisture content of spices prepared for storage should not exceed 12-15%. If the above is observed, the collected spices can be stored for 2-3 years. Most of the useful properties of the medicinal plant species, which provide valuable raw materials and are necessary for health, are widespread in the desert, hilly, mountain and pasture regions of our republic, and some of them are cultivated. Below, we present some of the widely used and widely used spices in nature.

**Dracocephalum integrifolium Bge** belongs to the family of lamiceae, it is a shrub 30-40 cm tall, the branches are covered with short, soft hairs. The leaf is sharp, mostly pinnate, entire-edged, sparsely hairy, with small teeth at the base of the upper leaves. The flowers form inflorescences at the ends of the branches. The length of the sepals is 9-14 mm, hairy purple. Petals are 15-18 mm in size, the outer side is thick, soft hairy, the inner side is sparsely hairy, purple. It blooms in June-July, and its seeds ripen in July-August. Dracocephalum is found on gravelly mountain slopes in Tashkent, Fergana, Samarkand, Kashkadarya, Surkhandaryaregions. Dracocephalum has a pleasant smell and contains 2-3% essential oil. This plant can also be used as a spice plant.

**Thymus seravschanicus Klok** is a low-lying, woody shrub, 10-20 cm tall, belonging to the family of labraceae. The leaf is inverted ovate and oblong, obtuse, the base is elongate and almost free, ciliated, the edge is entire. The flowers are located in three parts of the stem. The flowers are short. Sepals are 4-5 mm long,

sepals are 5-7 mm in size, pale pink, slightly hairy on the outside. *Thymus seravschanicus* Klok blooms in June-August, and its seeds ripen in July-September. It is widespread in the rocky and soft soils of the mountain region of our republic. Local people have been using it as a spice since ancient times. It is used to prepare various foods, especially gas. *Thymus seravschanicus* Klok is used in the industry for the preparation of vegetable, meat, fish, mushroom preserves, sausages, and when added to vermouth, liqueur, vodka, and candies, it adds flavor. *Thymus seravschanicus* Klok contains additives, protein, dyes, gum, tar, oils, organic acids, mineral salts, vitamin C and 0.26-0.35% essential oil. The essential oil is fragrant, brown in color and consists of phenol, thymol, carvacrol.

***Ziziphora pedicellata* Pazijetved.** is a 40 cm tall perennial plant belonging to the family of marigolds. The leaf is short-lobed, with a rounded margin, and the base is pinnate, hairy or sparsely hairy. The flowers form spherical, round-shaped inflorescences in three parts of the branches. Petals are 7-8 mm, light purple. It blooms in June-July, the seeds ripen in July-August. *Ziziphora pedicellata* Pazijetved grows on the gravelly and stony, brown soil of the northern, southern, and southwestern slopes of the mountain regions and at altitudes up to 2400 m above sea level. *Ziziphora pedicellata* Pazijetved is one of the favorite spices of the local people, and it is used in the preparation of various dishes and salads. In folk medicine, it is boiled and drunk against heartburn. Its leaves, stems and flowers contain 0.06-2.3% essential oil. Essential oil is light green or yellow, brown, and its composition consists of menthol, menthone, pulegone, pinene.

**Summary:** In summary, most of the species of the labrum family are used as spices. It can be useful for salting fruit and vegetable products. *Ziziphora pedicellata* Pazijetved can be used in the canning of various meat and fish products and in the production of wine and liquor. This plant is better than black pepper and bay leaves in terms of healing and pleasantness. Some plants - mint, cilantro, basil, and chives are mainly eaten raw and dried during the growing season. In addition, herbs enrich food with vitamins B1, B2, C and carotene, mineral salts and other useful substances. People have been using herbs for food since ancient times. When spices are used in dishes, they are not only tasty, but also increase their biological value and improve their quality. It enriches their composition with biologically active substances and keeps food from spoiling for a certain period of time. It does not allow microorganisms that cause their deterioration to live and multiply. At the same time, in the food industry, a lot of attention is paid to the use of spices in the preparation of various marinades, vegetable, fish and meat preserves, in the production of alcoholic and non-alcoholic beverages.

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