



PINE TREE AND ITS SPECIES

Jumayeva Dilnoza Abdusattor qizi

Denov Entrepreneurship and Pedagogical Institute,
department of Biology
jumayevad34@gmail.com
<https://doi.org/10.5281/zenodo.8198807>

Key words: tree, height, leaf, flower, root, stem, branch, branch, annual, buds, busy, pollinated, wind pollinated, panicle, bark, toothed, maternal flowers, paternal flowers, Inflorescence, unisex, bud, hairy, seed, type, landscape, young.

Abstract: Pine is a coniferous tree belonging to the pine family, and about 100 species are known. The height of a pine tree is 25-30 m, the branches are wide, the conifers are 8-15 cm, thin, pencil-shaped, dark green, hard, with a sharp tip. The dome is large, 6-10 cm long, 4-5 cm wide, the grains are rhomboid, shiny, brownish yellow. Pine does not choose environmental conditions. In southern conditions, it forms a forest in mountainous areas, on sandy river banks, in swamps.

Pine (Pinos) is a family of coniferous trees and shrubs belonging to the pine family. Mainly, it is distributed in the forest zone of North America and Eurasia, and to a lesser extent in the tropical and subtropical mountains of the Northern Hemisphere. About 100 species are known. There are 12 wild species and 70 introduced species in Russia. Pine does not grow wild in Uzbekistan. Pallas or Crimean pine, ordinary pine, and Schrenk pine species of its categories such as black pine, tilogoch, fir and cedar are grown. The height of Pallas or Crimean pine is up to 15-20 (30) m. The chest is wide and long. Coniferous leaves are 8-15 cm, thin, pencil-shaped, dark green, hard, with a sharp tip. The dome is large, 6-10 cm long, 4-5 cm wide, the grains are rhomboid, shiny, brownish yellow. Pine does not choose environmental conditions. In southern conditions, it forms a forest in mountainous areas, on sandy river banks, in swamps. The light-loving stem grows upright, 20-40 m high. The bark is reddish-brown. It reproduces with the help of seeds. There are 2 domes on shortened branches. Stored up to 3 years. Most of them are 2-lobed, the dome consists of microsporophyll or megosporophyll bundles. Under the microsporophyll, 2 or more pollen sacs (microsporangium) are located. Megosporophylls - dome-shaped. In the center of the dome will be a long shaft. Around this axis there are sticky scales, in the axil of which the seed coat is located. Megosporangium - seed bud is located on the upper side of this seed coat. It takes a long time from pollination to fertilization. Pine seeds fully mature only in the 2nd year. During this period, the external structure of the dome increases. The color also changes a lot.



Pine tree.

3 types of domes can be observed in pines every year:

1. small red domes that occur during pollination.
2. in the process of germination - rather large green domes.
3. observed when the seeds are ripe - large brown domes.

There are many types of pines, but they differ from each other in morphological structure, the size of the dome, the color of the stem, and the location of the leaves. Pine is a heat-loving, light-loving plant. Lives up to 150-500 (600) years. is propagated from the seed. It is grown as an ornamental plant on city streets and avenues. All types of pine are used in wooden furniture making, construction, board preparation, tar extraction

Veymutov pine is a large tree with a height of 35-50 m and a diameter of 1.5 m, with wide and pyramidal branches. The shell of the body is cracked, dark gray in color. Branches are thin, brown-gray, sparsely hairy. The jacket is covered with adhesive beads. The leaves are three-sided, 5-10 cm long, soft, thin, blue in color, and are kept on the tree for 2-3 years. The sheath of my coin-shaped leaves is shed in the first year. When burning, snow burns, the leaves pair with each other to form a thin bundle. That's why the branches are thinned, snow and rain water is not caught in it. The resin ducts are located in front of the epidermal tissue of the leaf. Maternal domes are placed one by one or in groups of 2-3. The domes ripen in the second year, at which time the lower side bends and remains green for most of the time. It grows up to 8-15 cm, then becomes woody and turns brown. Ripe pods open in the fall and the seeds are shed on the ground. The seed is 5-7 mm long, winged, and retains the feature of germination for up to two years. It spreads with the help of wind. The weight of 1000 seeds is 18-23 g. Pine grows well from seed. In the first year, the tap root develops well, and then it produces lateral roots. Pine grows well on fertile soils, including sand and black soil. The root is extremely rich. This pine is part of the middle region. It is resistant to severe frost, snow cover and almost shade-loving, drought-resistant. The wood has a heartwood, light, soft, clear yellow color. Its wood is used in construction, match industry.

Eldor pine tree - grows up to 12-15 meters in natural conditions. This pine species is the southernmost pine species growing in the CIS. The only common place of this pine species is the vast Eldar steppe, which is located on the border of Azerbaijan with Georgia. From east to west along the right bank of the Iori River flowing through the steppe, on the northern and northeastern slopes of the Eylyar-Ougi mountain range, from 200 m to the watershed grows on the slopes. Eldar pine grows on rocky terrains and is satisfied with the annual rainfall of



200 mm. It does not rain at all in the summer months. Here they grow as individual trees or small pine groves. The natural recovery process is in an unsatisfactory state. Pine branches are pyramidal in shape, petals are 8-12 cm long, 0.9-1 mm wide, each bundle has 3 petals. The leaves live for 2 years, then fall off. It blooms in April, the domes mature for 2 years (20-22 months). It opens in 3-4 years and the seeds spread around. The seed pods are kept on the tree for a long time. The seeds are light brown, winged, 27-33 mm long. Seeds retain their ability to germinate for 2-3 years. Features such as fast growth and resistance to dry heat have made it a promising species for landscaping.

Crimean or Pallas pine is a large tree with a height of 35 m and a diameter of up to 50 cm. The bark of its body is dark gray and its branches are reddish in color. The buds are conical, with a sharp tip, covered with resin. The leaves are dark green, hard, shiny, with a sharp tip, 15-16 cm long, twice as long as those of a common pine. They are placed in groups of 2 on a branch. The dome is very large. Pollinated in May. The dome ripens in the spring of the third year after pollination. A ripe dome is yellow-brown in color, 5-10 cm tall, larger than that of a common pine. The seed is also large, 6 mm long, winged. This pine is also propagated from seed and grows well in open ground. It can live 500-600 years.

Yellow or heavy pine is a tree that reaches 50-65 m in height. It can live up to 500 years under favorable conditions. The trunk is pyramidal or cone-shaped, the bark is dark brown or black, the branches are brick-like, and the branches are brick-red, hairless, shiny, the buds are covered with coins, cylindrical, the leaves are green, They are placed in groups of 3 on a branch. Rough, three-sided, with a row of cracks on each edge. Domes are yellow, 10 cm, shiny. The seed is large, 7-9 mm long, 6-7 mm wide, brown with wings, the length of the wing is 2.5-3 cm, the weight of 1000 seeds is 35-36 g. It reproduces well from seed. This type of pine grows well in sandy soils in open areas. Almost frost-resistant. Wood is ripe and fragrant, pleasant tree. This pine is distributed in the western regions of North America. It was introduced to Uzbekistan for landscaping purposes.

References:

1. Dendrology: a textbook for forestry and landscaping students/ AQ Qayimov, ET Berdiyev. — Tashkent: Publishing house named after Cholpon, 2012. - 336 pages
- 2.O'. Prator, L. Shamsuliyeva, E. Sulaymanov, Kh. Akhunov, K. Ibodov, V. Mahmudov, Botany (morphology, anatomy, systematics, geobotany) Tashkent-2010.286 pages
- 3.BS Islamov, MA Hasanov BOTANY (Textbook) Samarkand-2020.570 pages
- 4.Kh. Haydarov, Y. Tashpulatov, Kh. Jalov, I. Mukumov (High plants) textbook Samarkand-2019 129 pages
- 5.E. Berdiyev, Sh. Gulamkhodjayeva Breeding scenic trees. Study guide Tashkent-2020. 232 pages
- 6.Kalandarov Mukhitdin Makhmudovich Landscape gardening << Sano-standard>> - Tashkent 2014, 231 pages
- 7.Islamov BS, Hasanov MA, Botany. Textbook.- Samarkand: SamDU publishing house, 2020-568 p.