



Spruce. Common spruce cones

Product Images

Short Description

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Description

Specification & Spread

Common spruce cones – strobili piceae abietis

Common spruce — picea abies (L.) Karst.

Pine family — pinaceae

Other names: spruce.

It is an evergreen coniferous tree 20-50 m tall, with an acuminate conic.

The bark is red-brown or gray, peeling off the old trees with thin scales.

The young branches are brown or reddish, bare or slightly pubescent, with strongly protruding leaf marks.

The buds are ovoid-conical, acuminate, brownish.

The leaves (needles) are tetrahedral, pointed, shiny, bright or dark green, 20-25 mm long, 1.0-1.5 mm wide, densely cover the branches.

Male cones are oblong-cylindrical, 20-25 mm long, surrounded at the base by light green scales. Female cones are drooping, first red, then green, mature brown, 10-16 cm long, 3-4 cm wide.

The seed scales are woody, rhombic, convex, wavy at the top and gnawed-toothed.

The seeds are dark brown, with a wing 3 times longer than it.

The pollination occurs in May - June.

Spreading. It is distributed throughout the forest zone of the European part of Russia, forming pure and mixed forests. In the extreme north of the Kola Peninsula, in the north-east of European Russia, in Siberia and in the Far East, a close species grows - Siberian spruce (*Picea obovata* Ledeb.). Finnish spruce (*P. × fennica* (Regel) Kom.) It dwells in the zone of contact between the ranges of these spruces, being a hybrid between it and characterized by transitional characteristics in the structure of the crown and female cones.

Habitat. Spruce trees form dense forests on rich soils, often with an admixture of pine and birch.

Composition

The chemical composition of spruce cones

Spruce cones contain: essential oil, in its composition,

- bornyl acetate (1.4%), alpha- and beta-pinene, delta3-carene,
- myrcene,
- limonene and others,
- vitamin C,
- tannins (6.7%),
- tar,
- mineral salts,
- phytoncides.

Harvesting and storage of raw materials

Harvesting. The cones are harvested in the summer, in June - August, before the seeds start ripening, immature. There is forbidden harvesting of fallen cones.

The official species is the European spruce, but in fact the cones and two other very close species are harvested: Siberian spruce and Finnish spruce.

Drying. It is dried on racks, under canopies.

External signs of raw materials

Whole raw materials

The cones are oval-cylindrical or oblong-elliptical, 3-14 cm long, 1.5-5 cm wide; formed by spatially located covering scales, in the axils of which there are larger seed scales.

The covering scales are 3-4 mm long, 1.2-1.6 mm wide, lanceolate, membranous, with an elongated fringed edge along the edge, red-brown in colour.

The seed scales in young cones are elongate-oval, greenish-brown, 8-10 mm long, 5-7 mm wide.

In more mature buds, the seed scales are much larger - 25-27 mm long, 14-15 mm wide (Picea obovata - up to 15 mm long and 11 mm wide), rhombic in outline (Picea obovata - obovate), at the top wavy and gnawed-toothed (in Picea obovata - with a rounded solid edge); its surface is greenish or light brown, glossy at the top, darker at the base, matte. At the base of each seed scale are two seeds, covered with a glumaceous wing. The seeds are ovoid, brown, up to 5 mm long, up to 3 mm wide; the free end of the wing is up to 11 mm long and up to 6 mm wide. The resinous secretions are often noticeable between the seed scales.

The smell is fragrant. The taste is astringent, bitter.

Milled raw materials

The pieces of raw materials of various shapes, passing through a sieve with openings with a diameter of 10 mm.

The colour is brown, light brown, greenish brown.

The smell is fragrant.

The taste is astringent, bitter.

Properties and application

Pharmacotherapeutic group. Antiseptic.

The pharmacological properties of common spruce

The amount of biologically active substances spruce cones has:

- antimicrobial,
- local anti-inflammatory effect.

Application of common spruce

Spruce cones are used to treat:

- diseases of the upper respiratory tract in the form of inhalation and rinsing.

It is applied as:

- antispasmodic,
- bacteriostatic remedy for urolithiasis, renal colic.

Contraindications

Individual intolerance, allergic reactions.

During pregnancy and lactation with caution.

