SCOTS PINE STUDY PROSPECTS

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Introduction. The Scots pine (Scotch pine) (*Pinus silvestris* L.) of the *Pinaceae* family is an evergreen coniferous tree. The plant reaches up to 40 m in height and up to 1.5 m in diameter. It is one of the most widespread plant species of forest and forest-steppe zones and is the main forest steppe species of Ukraine. Efficient use of needle-foliage, i.e. waste occurring in lumbering industry, is one of the most relevant problems of forest industry.

Aim. To conduct an analysis of literature data on dissemination, raw materials base, chemical composition, types of biological action of the Scots pine.

Materials and methods. Comparative method, systematized search, integration of information.

Results and discussion. According to the literature data, a pine is the main source of ether oil, rosin, turpentine, turpentine oil, tar. Buds, young shoots and needle-foliage, which contain ether oils, resins, carotenoids, ascorbic acid, phytoncids, pinicicrin bitter substance, flavonoids, phenolcarbonic acids, and tanning substances, are used in medicine. Ether oil contains pinene, carene, terpineole, limonene and other terpenoids.

Pine buds are registered raw material, are included in a range of pharmacopoeias, and are included in the State Pharmacopoeia of Ukraine.

Buds are used in the form of decoctions, infusions and tinctures for inhalation, as an expectorant, as a disinfectant in case of upper air passages diseases, and as a diuretic and an anti-inflammatory agent. Pine needles are included in the composition of I. Traskov antiasthmatic mixture. Vitamin drink is extracted from needle-foliage; it is included in the composition of chlorophyll carotene paste, which is used in case of skin diseases and burn injuries.

Ether oil is included in the composition of medicinal products for treatment of respiratory diseases, supporting-motor apparatus disorders, metabolism, and climacteric syndrome. Turpentine produces analgetic effect and is used in case of lumbago, neuralgia, and myositis. Tar produces disinfecting effect and is included in the composition of Vishnevsky ointment. Activated carbon is used to treat flatulence and in case of poisoning.

Conclusions. Scots pine has sufficient raw materials base and is a promising object for further study.