

MEDICINAL USE OF BITTER WORMWOOD (ERMON) PLANT PROPERTIES AND CHEMICAL COMPOSITION.

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Abstract.

The aerial part of wormwood during flowering, the leaves before flowering, contain sesquiterpene lactones, bitter glycosides (absinthine, anabsinthine, artabsin and others), which give the plant a peculiar bitter taste, saponins, flavonoids, phytoncides, ascorbic acid, resinous and tannins, potassium salts, artemisetin, essential oil (0.2-0.5%), carotene, organic acids (malic, succinic). Essential oil is a thick liquid of blue or dark green color with a sharp bitter taste.

Key words: *wormwood, inductively coupled plasma mass spectrometer, yellow, marginal pistillate.*

Botanical description. Plant height 50-200 cm, often grows like a shrub, with a taproot branched root and erect shoots, with silver-felt pubescence. The stems are straight, slightly ribbed, branched in the upper part, often forming short barren shoots at the base. The lower leaves are long-petiolate, twice or thrice pinnately dissected; segments of all leaves are linear-oblong, bluntly pointed [1-2]. The flowers are all tubular, yellow; marginal pistillate, median bisexual. Baskets are spherical, 2.5-3.5 mm in diameter, collected on short branches in one-sided brushes, which, in turn, form a narrow paniculate inflorescence. The wrapper of the baskets is tiled, the leaves are broadly membranous. Receptacle convex, hairy. Flowering in the European part of Russia in June-July [3-4]. The fruit is a brownish pointed achene about 1 mm long, oblong-wedge-shaped, finely furrowed, with a rounded, slightly convex area at the apex. The fruits ripen in August-September.

Chemical composition. The aerial part of wormwood during flowering, the leaves before flowering, contain sesquiterpene lactones, bitter glycosides (absinthine, anabsinthine, artabsin and others), which give the plant a peculiar bitter taste, saponins, flavonoids, phytoncides, ascorbic acid, resinous and tannins, potassium salts, artemisetin, essential oil (0.2-0.5%), carotene, organic acids (malic, succinic) [5-6]. Essential oil is a thick liquid of blue or dark green color with a sharp bitter taste. The composition of the essential oil obtained from plants by steam distillation includes thuy alcohol (up to 10-25%), thujone (up to 10%), pinene, cadinene, phellandrene, β -caryophyllene, γ -selinene, β -bisabolene, curcumene and chamazulenogen. Absinthine, anabsinthine, orthabsin, prochamazulenogen, ketolactones A and B oxylactone and artemisetin were also found in the aerial part of wormwood [7-8].

Medicine. Tincture, infusion and extract of wormwood are used as bitterness to stimulate appetite and improve the activity of the digestive system. In folk medicine, the use of wormwood is much wider, in addition to the above, it is used as a choleric, diuretic, analgesic, sedative, disinfectant, anti-inflammatory and anthelmintic agent [9]. In addition, it is used in a mixture with other fragrant plants - mint, thyme, calamus for rinsing the mouth with an unpleasant odor [10]. In folk medicine, wormwood has long been used as a disinfectant, analgesic and decongestant for bruises and wounds. In this case, fresh juice from the grass or crushed grass is used, which is applied to damaged areas, it is considered especially effective for sprains and sprains of the tendons. It is used for ulcers and poorly healing wounds [11].

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