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Useful Properties of Medicinal Chamomile (Matricaria Recutita)

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A B S T R A C T
The article contains information about the useful properties of chamomile (matricaria recutita), its chemical compounds. in particular, its medicinal properties and its role in the treatment of diseases are described.

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After gaining independence, the pharmaceutical industry of the Republic of Uzbekistan began to develop rapidly. Currently, the number of such enterprises is more than 70. For this reason, it is necessary to adequately supply this industry with raw materials of medicinal plants. Next, if we take into account that approximately 50% of the drugs of the pharmaceutical industry are prepared from raw materials of medicinal plants, the cultivation of medicinal plants; it is difficult to imagine how important the development of agrotechnics for their cultivation has become. The importance of using raw materials of medicinal plants for pharmaceutical, partly for food needs, as well as for improving human health and the environment is growing rapidly.

Chamomile (Matricaria recutita) is one of the most useful and effective plants in nature's pharmacy. This plant is widely used in the treatment of headache, brain, tooth, ear, eye pain and other diseases. Basically, it has the ability to fight against microbes, reduces inflammation in the intestines, reduces allergic reactions, and normalizes the secretion of bile. Chamomile is widely used as a medicinal plant, and its tea is often used to relieve stress, calm nerves, and treat sleep problems. A decoction of chamomile flowers for the skin has a similar soothing effect, moisturizing it and helping to fight blemishes. Chamomile is useful for its many properties: it is suitable for all skin types. Chamomile gently moisturizes dry and sensitive skin and improves its condition. It helps to fight against skin transfer and inflammation. If the skin is oily and prone to problems, the antibacterial components in chamomile help to reduce inflammation and normalize the production of oil in the skin.

Coumarin is a plant substance contained in flowers, which stimulates the regeneration of damaged skin cells, helps to effectively fight against acne and other spots. Strong antioxidant carotene improves the structure of the skin, protects it from the effects of free radicals and slows down the aging process.

Geographic distribution. Medicinal chamomile is widespread, it grows mainly in settlements, fields (as a weed), roadsides. It is found mainly in the south of the Japanese part of Russia, the Caucasus, Crimea,

Ukraine, the southern regions of Siberia and Central Asia. Green chamomile is widespread in Europe, Western Siberia and the East. The product is made mainly in the south of Ukraine (Crimea, Kherson, Nikolaev, Odessa regions), less often in the Krasnodar region, Rostov region, the Republic of Moldova and other places. Chamomile grows very quickly. Both chamomiles are grown in Ukraine, Belarus and other places due to high demand.

Botanical description. Medicinal chamomile is an annual herb growing 15-40 cm tall. The stem is upright, branched, hollow inside. The leaf is divided twice, the segments are thin linear, with a sharp tip. The stem and branches are finished with flowers gathered in a basket with long bands (green chamomile has short bands). The fruit is a brown-green pistachio. It blooms from May to autumn.

Chemical composition. The flowers collected in the basket contain 0.22-0.8% essential oil, aniin, quesimetritrin, quercitin, luteolin and other (35 compounds) flavonoids, matricarin and matricin from the lactones of the guaianolide group, polyine lactones with heterocyclic ring, proxamazulen, coumarins (umbelli - feron, herniarin), dioxycoumarin, carotene, vitamin C, mucus and other substances. According to XI DF, ordinary chamomile flowers should contain 0.3% essential oil, and green chamomile should contain 0.2% essential oil. The essential oil is a blue liquid containing 1.64-8.99% hamazulene, up to 20% sesquiterpene alcohols, cadinene, tricyclic alcohol, bisabolene and its oxides, caprylic, nonyl, isoverric acids and other terpenes and sesquiterpenes. The total amount of sesquiterpenes in essential oil is up to 50%. Hamazulene is the main active part of essential oil.

Medicinal properties. Chamomile flower is used as an emollient, antiseptic and anti-inflammatory agent (mouth and throat rinse, medicinal bath and enema). A tincture is prepared from chamomile flowers (baskets). Baskets are used in stomach diseases, gargling, and are also part of soothing teas. In addition, in gastrointestinal diseases, chronic diarrhea, chronic gastritis, kidney and bladder diseases, hemorrhoids, chronic pharyngitis and laryngitis, gastritis, duodenal ulcer, headache, prevention of insomnia and other used in the treatment of diseases[1,4]. According to Ibn Sina, "chamoiselle makes the brain stronger and is useful for headaches caused by cold. It is used to remove bad substances from the head. If it is left and bandaged, it will heal the cracked wounds in the corner of the nose. Moves phlegm and cures jaundice. Dilutes urine and removes stones. It is more beneficial than any other anti-fatigue drug."[5] Chamomile is said to be helpful in relieving spasms, gas, and menstrual cramps. The alpha bisabolol substance in chamomile has a good effect on the wound; Azulene is effective against palpitations. It is used in the treatment of gastritis and ulcerative colitis. It also treats oral infections.

Agrotechnology. It is known from many years of experience that the chamomile plant likes light, is not very demanding on soil fertility, likes nitrogen fertilizers, and cannot compete strongly with weeds. It grows from chamomile seeds. The optimal planting season is autumn, and it is also possible to plant before winter and in spring. Autumn planting is carried out in dry lands after the first autumn rains, in late October and early November [6,7]. The main factor for the good germination of small seeds of chamomile is the condition of the upper layer of the soil where the seeds fall. This layer should be moist, and the temperature should be above 5 degrees until the seeds germinate. Chamomile is planted 50-60 cm apart and 7 cm deep. The seed is extremely small, so in order to sow it evenly, first, the seed is mixed with sand or manure in a ratio of 1/10. The seed will germinate in 8-10 days. When the seed germinates and produces 2-3 leaves, it is harvested. During the growth of the plant, it is fed twice with nitrogen at the rate of 30-40 kg per hectare. The crop blooms 30-40 days after germination. The degree of ripeness of the seed is determined by the long, conical shape of the basket [3].

Conclusion. Diseases around the world are with people, because chemical drugs are often used more than natural drugs to prevent diseases. But the chamomile plant is considered a natural remedy, it calms the nerves, stimulates the appetite and increases the secretion of bile, adding salt to the decoction made from its flowers is used for rheumatism and gout. Therefore, it is possible to breed it, to study the plant in depth and treat other diseases through its new properties.

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