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METHOD OF MAKING SYRUP FOR COLD DRINKS

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Abstract: This article describes method how to get new syrup from local herbs. A description of the components that describe the functional properties of cool drinks is provided. The duration and quality of drinks were defined. Besides it is clear that the plants listed below may be useful in nature and can be used in medicine.

Keywords: Syrup, components, herbal raw material, quality index.

Today, our government is conducting a systematic policy to strengthen the health of the population and raise a healthy generation, ensure the long life of our people, and create favorable conditions for a healthy and prosperous life. as well as "Nukus-farm", "Zomin-farm", "Kosonsoy-farm", "Sirdaryo-farm", "Boysun-farm", "Bo'stonliq-farm" and "Parkent-farm" issued by the head of our country on May 3, 2017 "Independent on the establishment of economic zones" to develop the pharmaceutical industry, support manufacturers of pharmaceuticals and medical products, fill the domestic market of pharmaceuticals with high-quality drugs produced in our country, grow medicinal plants, medicine raw materials for medicines in our country defined the prospects. This article is devoted to the preparation of syrups for a new type of healing cold drinks using raw materials of local medicinal plants. In evaluating the quality of the finished product, the generally accepted and special test methods used to determine the quality (organoleptic, physico-chemical parameters) of the raw material and finished product were used[1].

As a result of the research, 3 types of syrup were created, and their recipe, production technology and quality indicators were determined and developed. the quality description of the product is evaluated based on its organoleptic, physico-chemical and microbiological indicators.

In order to determine the usefulness and functional characteristics of the developed syrups, we will dwell on the medicinal plants and substances in their composition.

The composition of the extract in the recipe for "Yalpiz" (mint) syrup consists of Asian mint (myata aziatskaya) and mountain mint (myata dushistaya), pine nuts and yellow cherry juice, which grow in the territory of Uzbekistan.

Mint – myata aziatskaya and myata dushistaya grows in valleys and ditches, in stony and gravelly valleys and slopes, and in meadows. The above-ground part of the plant contains an average of 0.3-0.6% essential oil, which has a minty aroma and a slightly bitter taste. Essential oil is distributed in the leaves of the plant - 2.4-2.7%, in the

inflorescence - 4-6%, in the stem - up to 0.3%. It mainly contains chemical substances such as carvacrol, menthol, pinene, terpinene, menthilacetate, cineol, phellandrene, limonene, thymol, neomenthol. also organic acids, flavoring substances, flavonoids, carotene, hesperidin, betaine, ursolic and oleanolic acids, trace elements (copper, manganese, strontium, etc.); the flower contains compounds such as menthofuran, sabinene hydrate, peperic acid [2].

Table 1. The recipe composition of the syrups.

Quantity of products for 1 liter of syrup
(losses during cooking are not taken into account)

The name of the host	The amount of raw material in the syrup	Dry matter in raw material	
		Mass fraction, %	Mass, r
	"Yalpiz" (Mint)		
Sugar, gr	360	99.85	359.46
Extract of plant raw materials, cm3	72.5	2	14.5
Yellow cherry fruit juice, cm3	15.0		
Citric acid, gr	3.6	90.97	3.27
Aqueous solution of potassium iodide, cm3	0.7	5.0	3.5
Total, gr			
	"Kiyiko't" (Ziziphora)		
Sugar, gr	440	99.85	439.34
Extract of plant raw materials, cm3	87.0	2	17.4
Citric acid, gr	4.4	90.97	4.0
Aqueous solution of potassium iodide, cm3	0.7	5.0	3.5
Total, gr			
	"Olvoli" (Red cherry)		
Sugar, gr	400	99.85	399.4
Extract of plant raw materials, cm3	80.0	2	16.0
Cherry fruit juice, cm3	17.0		
Citric acid, gr	4	90.97	3.63
Aqueous solution of potassium iodide, cm3	0.7	5.0	3.5
Total, gr			

The pharmacological property of peppermint oil is mainly determined by the menthol substance in it. Peppermint oil has an effective effect on colds, destroys various viruses and microbes and reduces fever. It has a soothing effect on hoarseness and wheezing. Improves blood circulation in the brain by having a spasmolytic effect on blood vessels.

Peppermint oil can relieve any type of pain in the body - headache, joint and muscle pain. Relieves toothache and eliminates bad breath.

Pine nut - it contains essential oils, tannin, lipids, aromatic compounds, oleic acid, linolenic acid, carotene, resins, phytoncides, bioflavonoids, monoterpene hydrocarbons, terpenes, bornylancetate and ascorbic acid. Besides, it contains many vitamins: C, P, K and almost all vitamins of group B. Also, this plant extract is rich in trace elements such as selenium, iron and magnesium.

In folk medicine, its green form is mainly used. the tubers do not lose their greenness all the way through. They are picked in May-June. at this time, the tubers are soft and easy to cut with a knife. Tubers ripened in June-September are more effective in preventing vascular diseases and stroke. because by this time, the tubers are enriched with tannin. Tannin - has the property of restoring brain tissue [3].

When growing fruits, it is necessary to pay attention to the fact that the tree is not infected. In addition, there are female and male species of juniper. Useful substances are more abundant in the fruits of the female type of pine. This can be distinguished by the abundance of red ball fruits on the upper branches of the tree.

Many preparations made from pine cones - tincture, decoction, syrup, etc. are used in medicine and treatment as anti-microbial, cold-relieving, expectorant, sedative, blood-purifying, choleretic, antiseptic, poison-repelling drugs [4].

Yellow cherry prunus sogdiana is a type of mountain ash. It grows in the form of a tree-like shrub. leaves are long ovate, hairy. The fruit ripens in August, is yellow, round, sour, unripe in the seed; it is ground, jam, compote.

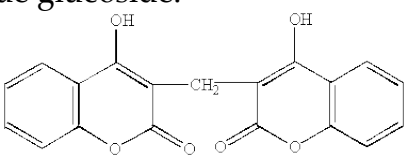
The fruits have a sweet-sour taste. Yellow plum fruit contains up to 7% organic acids (citric acid, malic acid, succinic acid, salicylic acid), trace elements (copper, iron, spirit, iodine, manganese, chromium, fluorine, molybdenum, boron, vanadium, cobalt, nickel, rubidium).), macronutrients (potassium, calcium, phosphorus, magnesium), as well as pectin, sugar (up to 14%), vitamins A, C, E, B1, B2, PP and folic acid.

"Kiyikot" (Ziziphora) syrup is prepared on the basis of the raw materials of the following medicinal plants, and let's get acquainted with their description.

Ziziphora (thymusserpyllum) contains up to 0.1-0.6% essential oils. Essential oil mainly contains thymol and carvacrol substances (up to 30%). Also there are additives, minerals, organic pigments and triterpenoids, tursolvooleanol acids.

Thymol - as a remedy against harmful bacteria and worms (ankylostomiasis, trichocephalosis and other helminthiasis) present in the gastrointestinal tract; It is used as a mouth and nose disinfectant, tooth pain reliever, as well as a preservative in pharmaceuticals.

Melilotus officinalis (l.) Pall. - the composition of the plant contains hay-smelling oxybrown acid lactone - coumarin up to 0.4-0.9%, dicumarin (dicumarol), coumaric and melilotic acids and melilotoside glucoside.



dicumarol

Also, it was determined that the plant contains purine derivatives, 4.3% of volatile substances, 17.6% of protein and 0.01% of essential oils. The seed contains 41.9% protein, 8.3% fat and around 9% starch.

Product preparation. When the plant blooms, the upper part of the ground is harvested and the shade is dried on the ground. After drying, it is chopped, leaves and flowers are separated, and the girdle is thrown away. This product consists of a mixture of crushed leaves and flowers.

Species (melilotus dentatis - odorless flower, additional leaf with serrated edges; melilotus albus - white flower) should not be mixed with the product. the product has a pungent smell, salty and bitter taste.

Use Medicinal preparations are used to treat wounds (aspirate pus) as a softening and effective medicine. Dicoumarol has anti-coagulant effect, it is 1000-1500 times stronger than coumarin. therefore, dicoumarol is used as an anticoagulant drug.

"Erman" (Bitter wormwood) syrup is prepared on the basis of extract of erman plant and olvoli (red cherry) juice.

“Erman” (Bitter wormwood) artemisia absinthium l. chemical composition of Contains 0.3 - 2% essential oil, bitter glycosides - absinthin and anabsinthin, organic acids and other substances.

It is the basis of essential oil, it contains 24.1 - 35.2% alcohol.

Product development. before flowering, only the basal leaves are prepared during two flowering periods. Then it is harvested from the end of the stem at a length of 25-30 cm and dried in a cool place. The product has a pleasant smell and a bitter taste [6].

Use It is used for appetite, liver, gall bladder and gastritis.

“Olvoli” (Red cherry) is a fruit tree belonging to the family of rhododendrons, belonging to the family of deciduous trees, which has about 150 species. About 25 species grow mainly in Asia, including Middle Asia and the Caucasus. In Uzbekistan, two varieties of the Makhaleb cherry, the licorice cherry, and the cherry (tashchiya) species are found in hills and mountains.

The fruit contains 7, 3-14, 5% sugar, 0, 8-2, 4% organic acids, 0, 15-0, 88% additives, C, B2, B9 vitamins, etc.

In folk medicine, cherry water is recommended as an expectorant and antipyretic agent for bronchitis, tracheitis and colds. Also the fruit is appetizing.

Cherry fruits contain glucose, fructose, sucrose, fiber, pectin, proteins and fats. It also contains many vitamins A, B1, C, PP and a number of trace elements such as potassium, calcium, magnesium, sodium, iron, iodine, manganese.

In modern medicine, cherry is used as an antiseptic, anti-anemia and anti-sclerosis, which has an effect against various inflammations. Hycoumarins and oxycoumarins in this fruit have an excellent effect on blood clotting. In this way, it is useful for people who have experienced myocardial infarction. fruits contain pectin, which has astringent effect and reduces the absorption of toxic substances from the intestine. Red cherry fruit quenches thirst, improves digestion, softens the stomach. Emulsion prepared from its seeds is used in the treatment of urolithiasis, chronic colitis, intestinal catatonia [7].

It is recommended to add potassium iodide solution to these syrups.

20-50 mg of iodine is in the human body in a big ass, and a third of it accumulates in the thyroid gland. Iodine is the only trace element among certain microelements in the human body that participates in the production of hormones, in particular, thyroid gland hormone - thyroxine. As an active component of the thyroxine hormone, it interacts with other endocrine glands and balances protein, fat, carbohydrate, water-salt exchange in the body. The molecular mechanism of iodine participation in metabolism is related to biological oxidation processes.

Table 2. The organoleptic indicators and quality of the soft drink are prezsented in the table below.

Naming of indicators	Description		
	"Ялпиз" (Mint)	"Кийикўт" (Ziziphora)	"Олволи" (Red cherry)
Appearance	Transparent, homogeneous liquid, without suspended particles and sediments	Transparent, homogeneous liquid, without suspended particles and sediments	Transparent, homogeneous liquid, without suspended particles and sediments
Color	Dark brown	Light brown	Reddish, bright brown color
Taste and smell	Natural herbal flavor (menthol), slightly sour taste, no extraneous flavors and odors. it has a light scent that smells like mountain mint	Natural herbal taste, slightly sour taste, no extraneous flavors and odors. It has a light deer scent	It has a natural herbal taste, has a light tangy taste, and does not have any extraneous flavors or odors. it has a light smell that gives the smell of erman plant

The results showed that it is possible to use the concentrate based on plant extracts to prepare various cool drinks. Its technological characteristics: viscosity, flowability, storage and transportation conditions do not differ from other types of concentrates available through trade networks.

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