

Medicinally Important Woody Species Of The *Rosaceae* Juss. Family In The Progress Of Neonatal Development

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ABSTRACT

The presented article provides extensive information about medicinally important woody species of the *Rosaceae* family that spread in the Nakhchivan Autonomous Republic flora. During the comparative analysis of the collected actual materials and literature data, it was determined that the woody species of the *Rosaceae* family in the flora of the autonomous republic are characterized by 116 species belonging to 20 genera. As a result of the research conducted by us, 53 species of 16 genera of the *Rosaceae* family spreading in the Nakhchivan AR flora have been determined to be of medical importance. The study of these medicinally important plants also allows to determine the important features characteristic of the woody species of the family.

In the article, based on the actual materials collected during the research conducted in the Nakhchivan AR at different times, detailed information about the prospects of the use of the woody species of the *Rosaceae* family of the region, is reflected. Also, information about the biochemical composition of medically important species, the rules of using their organs, their application and their use in relevant diseases is mentioned in detail. Thus, medicinally important woody species of the *Rosaceae* family spreading in the research area were analyzed more widely and accurately, and their role in scientific and folk medicine was determined.

Keywords: woody species, medicine, season, genus, species

1. INTRODUCTION

The lands of Nakhchivan, which have unique floristic characteristics, have been the focus of attention of doctors and travelers since ancient times. The flora of the area has a deep historical origin, has undergone a complex natural-historical development process, and has reached its present state by undergoing changes from time to time as a result of various physical and

anthropogenic influences. The main purpose of botanists' trips to the region was not only to study the local flora, but also to study individual plant species and determine their useful properties.

The study and use of medicinal plants began from the oldest historical periods - the period of primitive communities. Even the primitive men tried to use plants widely to protect their lives and eliminate the diseases that occurred. Comprehensive acquaintance with medically important plants, treatment work has gained wide scope in Azerbaijan as well as developed countries of the world. While treatment with medicinal plants was 30-40% near the end of the 20th century, this figure has increased to more than 50% in modern times. Thus, a number of natural chemical compounds specific to the body in medicinal plants affect physiological processes and increase the body's immune reactions without creating defensive reactions.

Some substances obtained from plants are not directly used for therapeutic purposes. In modern medicine, especially in terms of phytotherapy, the use of herbal medicines is considered a normal direction. Some medicinal plants are of special importance by improving the general tone of the body and stimulating the metabolism. Many medicinal plants are used both in medicine and in other sectors of the economy - engineering, perfumery, cosmetics and food industry.

Medicinal plants in the Nakhchivan Autonomous Republic flora are studied comprehensively by botanists, pharmacognosts, phytochemists, pharmacologists and clinicians, and the basis for using them for medical purposes is created. Of these studied plants, medicinally important species belonging to the *Rosaceae* family have a special role. When we look at the important woody species of the *Rosaceae* Juss. family in the flora of the autonomous republic, it can be seen that the medically important species of the family are more widespread. Thus, there is a need to study more comprehensively, taking into account the relevance of spreading patterns of medically important woody species of this family.

Material and methodology of the research

During the research, generally accepted floristic, geobotanical, bioecological, etc. methods, phenological observations were used. Literature sources, actual data obtained during field research were referred to as the main research material, and woody medically important species belonging to the *Rosaceae* family were selected as the research object [2, 41-48; 4, 605-607; 5, 41-48; 6, 56-60; 7, 69-79; 8, 177-187; 9, 199-202; 13, 267-268; 15, 535-542]. Identification of the medically important species studied is given according to the work "Trees and shrubs of the *Rosaceae* family in the Nakhchivan Autonomous Republic territory" [17, 19-91].

Discussion and conclusions of the study

One of the families of economic importance in the Nakhchivan Autonomous Republic flora is the flower family. As a result of personal research and existing literature materials, the systematic composition of medically important woody species of the *Rosaceae* family was determined and 53 species belonging to 16 genera were noted, and the comparative analysis of important species belonging to these genera is reflected in the following table (Table 1.).

Table 1: Genus analysis of medically important woody species of the family of the *Rosaceae* family

S/N	Genus	Species name	Phenophase (flower-fruit)	Abundance	In % of the total number of species belonging to the genus
1	<i>Amelanchier</i> Medik.	<i>Amelanchier ovalis</i>	V-VI	1	1,88%
2	<i>Armeniaca</i> Mill.	<i>Armeniaca vulgaris</i>	V-VI, VI-VII	1-2	1,88%
3	<i>Cotoneaster</i> Medik.	<i>Cotoneaster suavis</i>	V-VI	1	1,88%
4	<i>Comarum</i> L.	<i>Comarum palustre</i>	V-VI, VI-VIII	2	1,88%
5	<i>Cydonia</i> Mill.	<i>Cydonia oblonga</i>	X-XI	1-2	1,88%
6		<i>Crataegus chlorocarpa</i>	V-VI, VIII-IX	2	26,41%
7		<i>C. eriantha</i>	V	1-2	
8		<i>C. ferqanensis</i>	V-VI, IX-X	2	
9		<i>C. meyeri</i>	V-VI, IX-X	1-3	

10	<i>Crataegus</i> L.	<i>C. monogyna</i>	V-VI, IX-X	1	
11		<i>C. orientalis</i>	V-VII, IX-X	1-2	
12		<i>C. pallasii</i>	V-IX	2	
13		<i>C. pojarkoviae</i>	V-IX	2-3	
14		<i>C. pontica</i>	V-VII, IX-X	1	
15		<i>C. pentagyna</i>	V, VIII-IX	2-3	
16		<i>C. pseudoheterophylla</i>	VI, IX	2-3	
17		<i>C. sanguinea</i>			
18		<i>C. szovitsii</i>	V-IX	2	
19		<i>C. zangezura</i>	V-VI, IX-X	1	
20	<i>Malus</i> Mill.	<i>Malus orientalis</i>	IV-V, VII-X	2-3	1,88%
21	<i>Mespilus</i> L.	<i>Mespilus germanica</i>	IV-V, IX-X	2	1,88%
22	<i>Padus</i> Mill.	<i>Padus avium</i>	V-VI, VII-IX	1-2	1,88%
23	<i>Persica</i> Mill.	<i>Persica vulgaris</i>	IV-V, VII-IX	2	1,88%
24	<i>Prunus</i> L.	<i>Prunus communis</i>	IV-V	2-4	5,66%
25		<i>P. divaricata</i>	III-IV, VII-VIII	3-5	
26		<i>P. mahaleb</i>	VI-VII, VII-VIII	3-4	
27	<i>Pyrus</i> L.	<i>Pyrus acutiserrata</i>	IV-V	2	11,3%
28		<i>P. communis</i>	IV-V	3-5	
29		<i>P. oxyprion</i>	IV-IX	1	
30		<i>P. raddeana</i>	IV-V	2	
31		<i>P. syriaca</i>	IV-V	2-3	
32		<i>P. zangezura</i>	IV-V, VIII-IX	2	
33	<i>Rosa</i> L.	<i>R. brotherorum</i>	VI-VII	1-2	28,30%
34		<i>R. canina</i>	V-VI, VIII-IX	2-3	
35		<i>R. centifolia</i>	VI-VII	2	
36		<i>R. corymbifera</i>	VI-VII	2	
37		<i>R. damascena</i>	VI-VII	3-4	
38		<i>R. marschalliana</i>	VI-VII	1	
39		<i>R. nisami</i>	VII-VIII	3-5	
40		<i>R. sosnovskyana</i>	VI-VII	1-2	
41		<i>R. rapinii</i>	V-VI	2-4	
42		<i>R. spinosissima</i>	V-VI	2	
43		<i>R. pulverulenta</i>	VI-VII	2-4	
44		<i>R. teberdensis</i>	VI	2	

45		<i>R. tomentosa</i>	VI-VII	2-3	
46		<i>R. villosa</i>	VI-VII	2	
47		<i>R. zangezura</i>	VI-VII	2-3	
48	Rubus L.	<i>Rubus anatolicus</i>	VI-IX, IX-XI	1-2	5,66%
49		<i>R. caesius</i>	VI-IX	1-2	
50		<i>R. ibericus</i>	VI-IX	2	
51	Spiraea L.	<i>Spiraea hypericifolia</i>	V-VI, VII-VIII	2-4	1,88%
52	Sorbus L.	<i>Sorbus aucuparia</i>	V-IX	2-3	3,77%
53		<i>S. takhtajanii</i>	V-IX	2	

As it is known from our researches, the woody species of the *Rosaceae* family spreading in the Nakhchivan Autonomous Republic flora are important as medicinal plants in the scientific medicine and folk medicine. As can be seen from the mentioned above table, the directions of use of the genera with the dominant number of species, such as *Rosa*, *Crataegus*, *Pyrus*, *Prunus*, *Sorbus*, *Rubus*, are wider.

Hawthorn is one of the medically important plants spreading in the region. The medicinal preparation obtained from the leaves of green fruit hawthorn (*Crataegus chlorocarpa*) has a calming effect on the nervous system, regulates heart activity and normalizes blood pressure. Ripe fruits are soft, tasty and medicinal. It contains 11% sugar, fructose, triterpene acids (oleanol, ursolic), choline, acetylcholine, quercetin, vaccines, phytosterols, malic and citric acids, and vitamins A, C, P. Vitamin C is 31-108 mg%, P- 330-680 mg%, carotene - 2-4 mg%. In addition, it contains a large amount of pectin and other substances.

As a drug, it mainly has a cardiogenic effect. Strengthens myocardial contraction, triterpene acid improves venous and cerebral blood circulation, calms the sensitivity of the heart muscle, as well as cardiac glycosides, relieves discomfort around the heart. It is prescribed in complex therapy of the heart, climacteric syndrome and hypertensive diseases. Alcohol solution, extract and fruit are used in scientific medicine, and flowers and fruits are used in folk medicine.

Carotenoids in the fruits of *monogyna* hawthorn (*C. monogyna*); α - and β -carotenes, cryptoxanthin, violaxanthin, flavonoids: quercetin, hyperoside, 4-rhamnoside, vitexin, catechins - epicatechin, galocatechin, anthocyanin - cyanidin, vitamin C, polysaccharides, water-soluble polysaccharides, pectin substances, monosaccharides were determined. In its flowers - vitamin C, carotene, flavonoids - hyperoside, quercetin, kaempferol, rutin, vitexin, kratezid were determined. Its leaves contain sugar, flavonoids, triterpenoids and catechins.

A number of important preparations are obtained from monogamous hawthorn. "Kratemon" (*Crataemon*), obtained from them, is applied in case of coronary artery insufficiency. Liquid extract of hawthorn fruits is included in the composition of "Cardiovalen" drug. Hawthorn preparations are used in the treatment of many diseases. For example, it is antispasmodic, dilates heart blood vessels, improves blood circulation, is used in atherosclerosis and nervous diseases, dizziness, shortness of breath and insomnia.

The flowers and fruits of the hawthorn species are used in medicine. The flowers are harvested in May, and the fruits are harvested in August-September when they are fully ripe. The flowers are dried together with the leaves in the shade or at 35-40°C. When the fruits fully ripe, they are collected and dried at 50-60°C. It contains a number of medicinally important organic substances, as in other species. This includes flavonoids, triterpene saponins, coffee and chlorogenic acids, choline, acetylcholine, trimethylamine, essential oil, ascorbic acid and other substances.

Dark red hawthorn (*C. sanguinea*) flowers contain flavonoids - hyperoside, quercetin, vitexin, vitexin-rhamnoside, triterpene saponins (ursolic and oleanolic acids), choline and acetylcholine. Its fruits contain flavonoids (hyperoside, quercetin, vitexin), vaccines, saccharides, fatty oils and phenolic acid. Wild and cultivated hawthorn, which belongs to the shield-shaped flower group, is collected at the beginning of flowering and used as a quality medicinal plant raw material. Hyperoside 0.5%, moisture 14%, ash 11%, leaf and stem particles with other organs 3%, organic and mineral compounds at least 0.5%. Flavonoids - hyperoside, vitexin, vitamin C, flavonoids are obtained from the leaves of hawthorn, essential oil, flavonoids - hyperoside, quercetin, pinatifidin from its flowers, sugars, organic acids, sterols, vitamin C, carotene, catechin, anthocyanins - cyanidin and peonidin substances from its fruits. has been done.

It is used in medicine for various purposes. Infusion from its flowers and fruits is also used as a cardiogenic agent in heart failure, palpitations, angioneuroses, early forms of hypertension, hyperthyroidism accompanied by tachycardia, circulatory

failure, especially in climacteric periods and atherosclerosis. Aqueous extract of its fruits is a *cardioviolent* preparation. Ripe juicy fruits of wild and cultivated hawthorn are used as qualified raw materials.

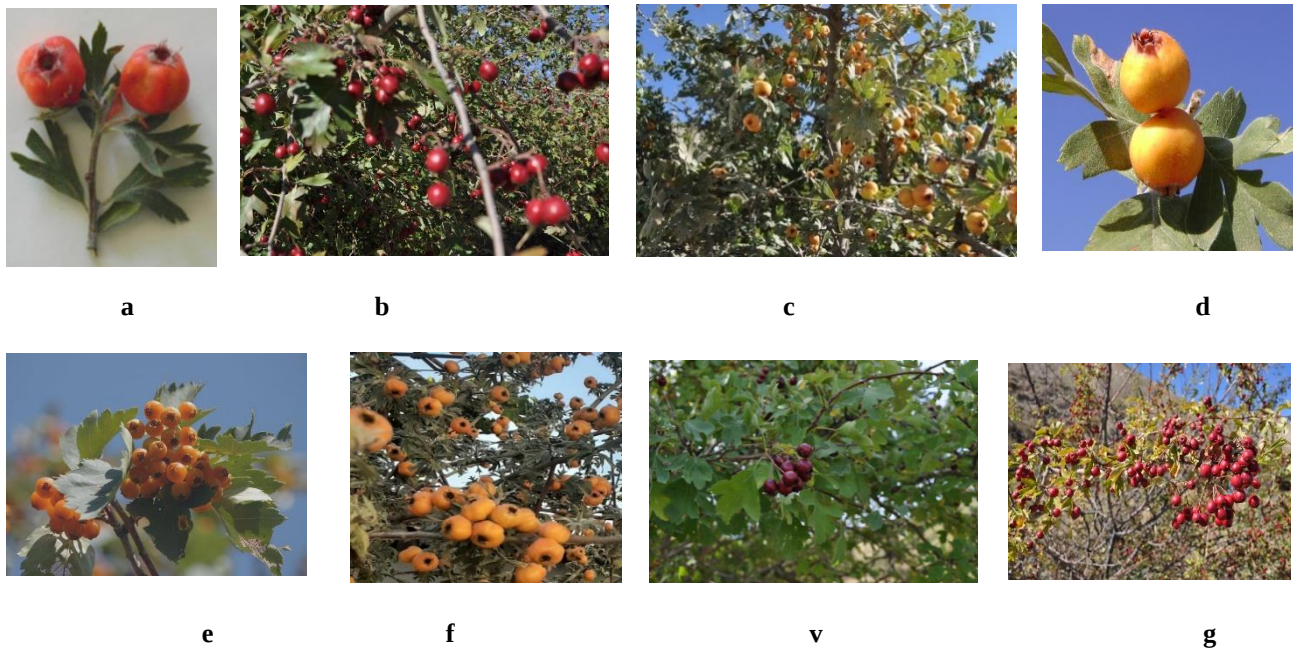


Figure 1. Medicinally important species of hawthorn

a-*Crataegus orientalis*; **b-***Crataegus pentagyna*; **c-***Crataegus szovitsii*; **d-***Crataegus pontica*;
e-*Crataegus chlorocarpa*; **f-***Crataegus pojarkoviae*; **v-** *Crataegus monogyna*;
g-*Crataegus sanguinea*

Inoculation substances, coumarin derivatives esculin and krategin were determined in the bark of the stem and branches of fivegamous hawthorn (*C. pentagyna*). Its leaves contain epicatechin, flavonoids - orientin, homoorientin, hyperoside, rutin, vitexin, quercetin, krateside. Sugar, polycarbohydrate, pectin substances, amino acids, sitosterol, triterpene saponins, phenolcarbonic acid (chlorogenic acid), epicatechin, halloocatechin, flavonoids-quercetin, hyperoside, vitexin, isoquercitrin, anthocyanin, lipids were identified in their fruits. Flavonoids - halogoside, krateside, orientin and vitexin were obtained from its flowers. Fruit jam is prepared and given to mothers with low milk (hypogalaxy) babies. For this purpose, the infusion, tincture and extract of hawthorn are also used. Fruit (*Fruct. Crataegi*) and leaves (*Flor. Crataegi cum foliis tot*) collected together with flowers are used in medicine. The flowers are dried together with the leaves in the shade or at 35-40°C. Dried raw materials have a weak pleasant smell.

The shelf life of raw materials is 2 years. Fruits are collected when fully ripe and dried at 50-60°C. The amount of cholesterol in the blood decreases due to the effect of hawthorn extract. Due to the influence of flavonoids, heart activity is regulated and blood circulation in coronary vessels improves [12, 51-55; 14, 27-33].

As a result of our research and experiments, it has been determined that most of the species belonging to the genus *Rosa* are medicinally important plants. Genus *Brotherus* hip (*R. brotherorum*), Marshall hip (*R. marshalliana*), Nizami hip (*R. nisami*), Rapin hip (*R. rapinii*), Sosnovsky hip (*R. sosnovskyana*), Teberda hip (*R. teberdensis*), Hairy rose hip (*R. villosa*), Zangezur rose hip (*R. zangezura*), Red rose hip (*R. tomentosa*), Cirayarpag rose hip (*R. spinosissima*) and Shield rose hip (*R. corymbifera*) have been proven to be medicinally important plants and are reflected in the table.

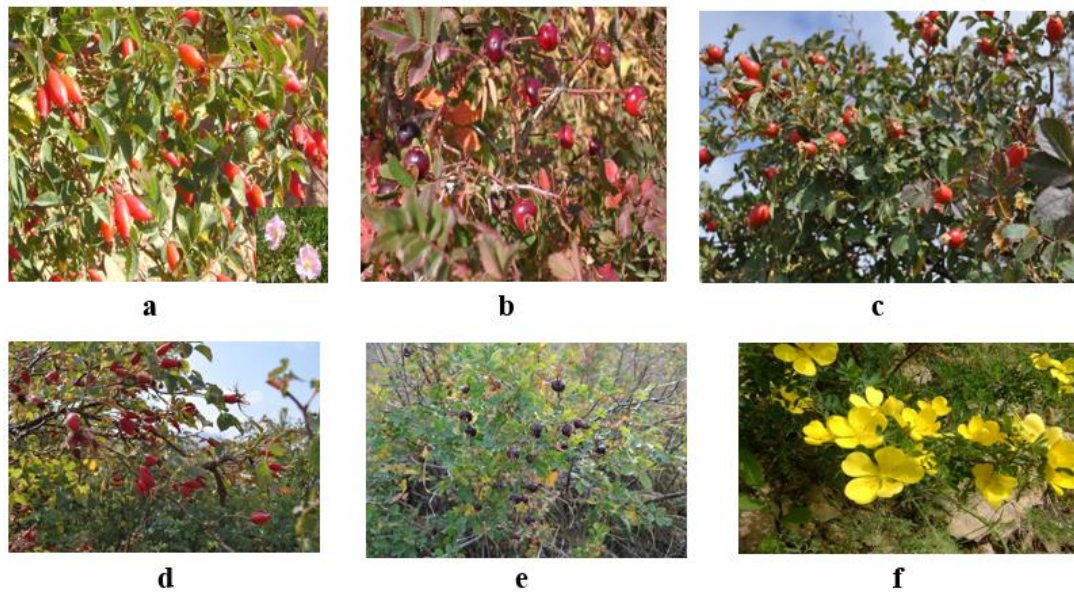


Figure 2. Medicinally important species of hips

a-*Rosa sosnovskyana*; **b-***Rosa nizami*; **c-***Rosa canina*; **d-***Rosa corymbifera*;
e-*Rosa pulverulenta*; **f-***Rosa rapinii*

Dogwood fruits contain ascorbic acid, phyloquinone, pigments (rubixanthin, lycopene), iron, calcium, manganese, magnesium, phosphorus trace elements, riboflavin, provitamin A, vitamin K, P, E and carotene. 2.46-5.52 mg% vitamin C, 9.75 mg% carotene, 14.1 mg% pectin substances, 1.58 mg% citric acid, 23.97 mg% total sugar, 18.56 mg% invert sugar, contains 5.09 mg% sucrose, 8.92 mg% pentoses. Its seeds contain oils, carotene and vitamin E. Roots and leaves contain inoculants (up to 80 mg%), seeds contain vanillin. Fruits contain polyvitamins and are used as tea. Syrup (*Sirupus fructus Rosae*), extract and mainly vitamin mixtures, medicine (*Cholosasum*) are prepared from fresh fruits. This drug is successfully prescribed for cholecystitis and hepatitis. Oil (*Oleum Rosae pingue*) is prepared from its seeds, which is used for burns, dermatitis, trophic ulcers, eczema, dermatosis and X-rays.

It is mainly used as a sedative, antimicrobial, astringent, anti-inflammatory, hemostatic, diuretic and in gastrointestinal diseases. It is prescribed in the treatment of neurosis, asthenia, anemia, exchange, hypertension and atherosclerosis. Application in injuries, fractures and infectious diseases increases the body's resistance. It can be included in any mixture. The chemical composition and uses of other medically important species of the genus are similar to those of dogwood. It contains vitamins, tannins, sugar, organic acids, other metabolic products, composition, quantity and quality indicators of leaves and fruits [3, 5-8; 16, 55-60].

Prunus species are widespread in the region. As it is known from the table, species belonging to the genus *Prunus communis*, *P. divaricata*, *P. mahaleb* are mainly used as medicinal plants.

Cultivated sweet almonds contain fatty oil (40-60%), protein substances (30%), mucus, vitamins, coloring substances, carotenoids - carotene, lycopene, etc., essential oil (0.5-0.8%)., has amygdalin glucoside, which has a sharp bitter taste and smell. In addition, it contains oleic glyceride (80%), linoleic (15%) acid. Linoleic and myristic acid were found in its seeds. Wild almond seeds contain toxic substances, especially amygdalin glucoside, cyanic acid, benzaldehyde and glucose. It is used in medicine as a sedative, tonic and pain reliever. Since it is essential oil, it is widely used in perfumery. Fresh sweet almond oil is used against sunburns, and in light industry in the preparation of chocolate and beverages. Along with apricots and citrus fruits, almonds are featured in many foods in Chinese and Indonesian cuisine, including rice, baked chicken, and other meat dishes. Sweet almond seeds are prepared and used in the form of emulsion [11, 146-147].

Almond tree seeds contain 50-60% fatty oil, which is obtained by cold or hot pressing. This is a non-drying oil. This oil mainly contains 80-90% glyceride of oleic acid. Bitter almond seeds contain 2.5 - 3.0% amygdalin glycoside in addition to oil. High-quality almond oil is widely used in the preparation of subcutaneous medicinal preparations, especially for the preparation of camphor oil. This oil is also included in some ointments.



Figure 3. Natural grouping of medicinally important almond species

Wild and cultivated types of cherry plum (*P. divaricata*) contain 3.12-5.96% sugar, 1.32-3.97% organic acids (mostly lemon), 0.46-1.39% pectin substance, contains carotene and vitamin C. Lavasha (mashed and dried) is made from cherries and preserved. It has medicinal value as a tonic and antiscorvy.

It is recommended to take the juice of ripe cherry in case of strong cough and tuberculosis. The juice of cherry leaves kills intestinal worms, relieves spasm, calms vomiting, and prevents the accumulation of mucus in the intestine.



Figure 4. *Prunus divaricata*

One of the medically important species belonging to the genus is Mahaleb forest cherry (*P. mahaleb*). The taste of the cherry fruit is sour-sweet, organic acids (citric, malic, quinine, amber and salicylic acid) were found in its composition. Also, the fruits contain macroelements (potassium, calcium, phosphorus, magnesium), microelements (copper, iron), pectin substances, vaccines, enzymes, anthocyanin, sugar (glucose, fructose), vitamins A, C, B2, PP, P. and coumarins.

Pear is one of the most useful fruits found in nature. Radde pear (*P. raddeana*) is one of the most useful fruits. The minerals in its composition strengthen bones, prevent high blood pressure, and relieve shortness of breath. Pears are also rich in potassium, which has a great effect on heart health.

At the same time, *P. communis*, *P. acutiserrata*, *P. oxyprion*, *P. syriaca*, and *P. zangezura* species of the genus are important as food and fodder, pollen and nectar plants, as well as medicinally important species [10, 17-21].

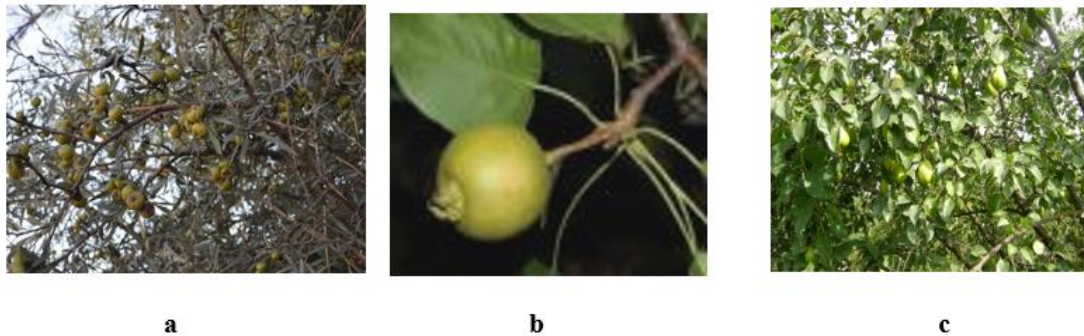


Figure 5. Medicinally important pear species

a-Pyrus oxyprion; b-Pyrus zangezura ; c-Pyrus communis

One of the plants of particular importance is the Anatolian blackberry (*Rubus anatolicus*) belonging to the genus *Rubus* L. characterized by 3 species. Blackberry is a very useful and healing berry. Fruits and leaves are widely used in folk medicine. Jam, syrup or compote made from its fruits is a cure for colds. Gray blackberry (*R. caesius*) and Georgian blackberry (*R. ibericus*) species are also very valuable as food and medicinal plants, like other important plants of the family [1, 97-99].

According to its chemical composition and its role in medicine, Common gooseberry (*Sorbus aucuparia*) is not inferior to other species. The fruit contains 18 mg% of carotene, cryptoxanthin, flavonoids, quercetin, isoquercetin, rutin, vitamins A, E and B, anthocyanin, vaccines, phospholipids, up to 2% pectin substances, parasorbic acid and its monoglycoside, triterpene saponin, sorbitol, there are various sugars, apple, wine and citric acids. Up to 22% fatty oil, amygdalin glycoside and 200 mg% ascorbic acid were found in its seeds.

It is widely used in scientific medicine and folk medicine. Common pear fruit preparations lower the amount of lipids in the liver and cholesterol in the blood. Among its important effects, its fruits also have a positive effect on reducing blood pressure and shedding kidney and urinary tract stones. Apart from these, ordinary gooseberry is also used in scientific medicine as a cure for warts and a medicine against malignant tumors.

In folk medicine, the fruit of common gooseberry is used as a mild laxative in the treatment of various diseases: salt accumulation, osteochondrosis, rheumatism, gout, kidney and bladder stones, liver, improving metabolism, colds and gastrointestinal diseases.

Apricot is one of the widespread species belonging to the family. Apricot is a very important food, medicinal and ornamental plant. Ripe apricot fruit contains 4-27% sugar, 0.32-6.6% various acids (citric, malic, malic acid), quercetin, lycopene, starch, preservatives (up to 1%), mineral salts, vitamins It contains C, PP, provitamin A (carotene). On average, 100 grams of the fruit contains 3.1-17.5 mg of vitamin C, 5-15 mg of provitamin-A and 0.0057 mg of vitamin B2. Among fruits, the most carotene was observed in apricots. The amount of carotene in it is the same as in butter, egg yolk, carrots and dried hips.

Apricot juice is rich in vitamin A. Carotene is an important compound for the development of the body. Apricot seeds contain 25-58% fat, pangamic acid (vitamin B15 was first found in apricot seeds by G. Krebs in 1951), amygdalin glycoside (up to 8% in varieties with bitter seeds), etc.

Apricot oil is injected under the skin and into the muscles as medicine. Since pangamic acid improves oxygen exchange in tissues, it has recently been used in liver and cardiovascular diseases. Sweet-seeded varieties are replacing almonds in the confectionery industry. Technical oil, which is highly valued in pharmacology, is obtained from bitter seeds.

Common quince (*Cydonia oblonga*), the only species of the genus *Cydonia* Mill, has a great role in medicine. So, the fruit, seeds and leaves of the animal have been used in folk medicine since ancient times. Tea is brewed from its leaves and young branches, and it is considered as a means of soothing heartache and reducing blood pressure. Jam made from its fruit is recommended as a tonic for heart failure. The dried bark of the trunk and branches of the quince tree is brewed as tea and used against dry cough. In folk medicine, they prepare "hayvarub (quince tea)" from the seeds of the quince plant and take it for colds.



Figure 6. *Cydonia oblonga*

Oriental apple (*Malus orientalis*) fruits and leaves contain an average of 85% water, up to 1.8% sugar, 16.7% dry matter, 1.9% pectin, 1.04% cellulose and 0.5% organic acids. There is also, the fruits of the wild apple are distinguished by the high amount of acidity and antioxidants. Sucrose, starch, pectin substances, organic acids, ascorbic acid, iron, copper, potassium, phosphorus, manganese, zinc, B-complex vitamins, essential oil, and vaccines have been identified in its fruits.

The composition of wild apple is characterized by a high amount of biologically active substances. They contain 20-40 mg% vitamin C, group B vitamins. The root and leaves contain the substance dihydrochalcone (fluoridzin). Fruits and leaves are used for medicinal purposes. Fresh fruits are prescribed for disorders of the gastrointestinal system and anemia. It is possible to make wine, vinegar, jam, povidlo, lavash, jelly, marmalade, kvass, juice, jelly, soft drinks and other products from them.



Figure 7. *Malus orientalis*

One of the medicinally important species is wild cherry (*Padus avium*). The fruit of the plant contains a number of important organic substances. These include sugar (up to 5%), preservatives (4%), organic acids (malic acid, citric acid), vitamin C, flavonoids, pectin substances, etc. In folk medicine, its dried fruits are brewed as tea and taken as a bactericidal and astringent medicine against diarrhea in gastrointestinal diseases. In addition, the infusion and cooking of dried fruit is used as a diaphoretic in colds and as a diuretic in kidney diseases.

Common peach (*Persica vulgaris*) fruit contains up to 19-12% sugar, 0.8% organic acids, antioxidants, pectin, carotene, vitamins A, E, C and B, minerals: potassium, sodium and iron salts. Its seeds contain 50-60% high-quality fatty oil and manganate ink. In medicine, an emulsion is prepared from its oil and drunk as a gentle laxative for stomachaches that often occur in babies. In addition, peach oil is used in the composition of "Oleum camphora", which is widely used as a heart medicine for emergency purposes. Peach has a very important therapeutic value in cardiovascular, kidney and gastrointestinal diseases. Common peach seeds contain 50-60% fatty oils. Peach oil is a non-drying oil, composed of glycerides, mainly oleic acid, small amounts of palmitic and stearic acids. In addition, the bitter varieties of its seeds contain 3-8.4% amygdalin glucoside, which is used together with almond oil to make bitter-almond juice.

Peaches are rich in vitamins B and C, sugar, malic, wine and other organic acids. Peach juice is used in strengthening the body, in kidney stone disease, as a febrifuge, as a valuable anti-nausea remedy. The peel of the fruit is burned, and the resin-like liquid obtained at this time is used to remove "yellow sores" from wounds on the face, and the ash is used to eliminate seborrhoea (seborrhea) from the hair.

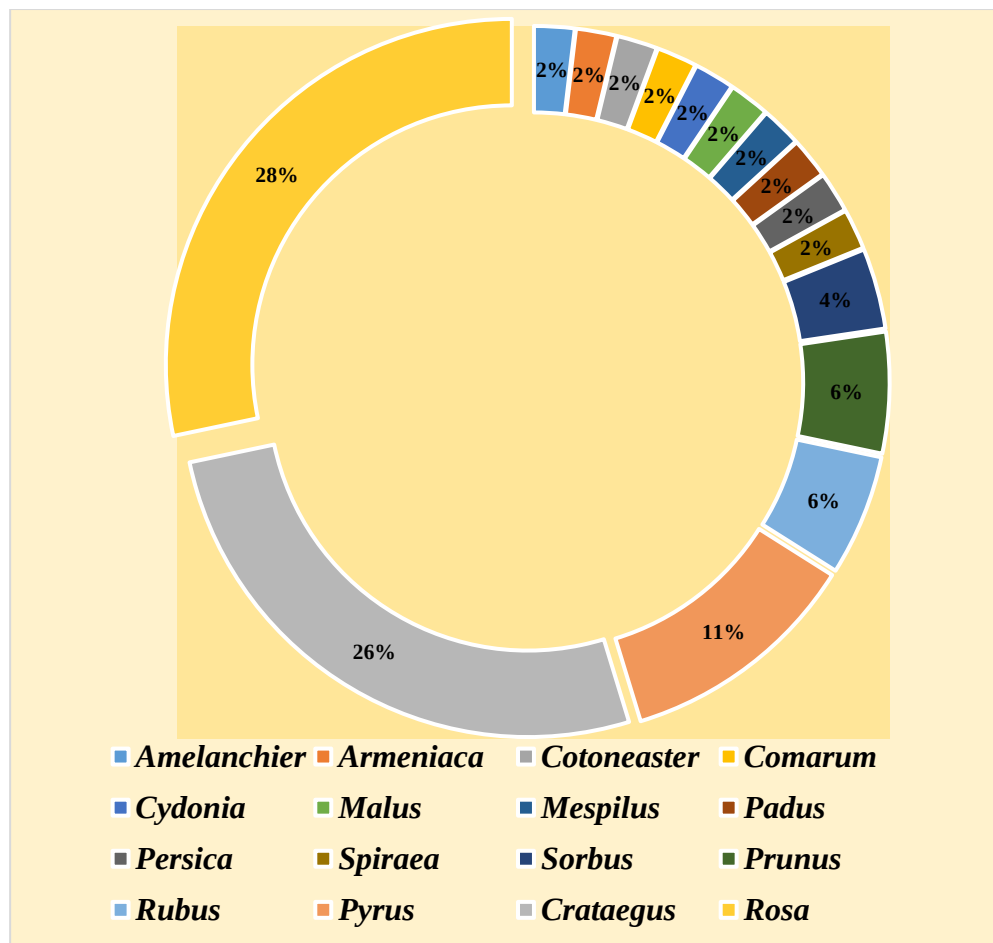


Diagram 1. Percentage of medically important woody species bygenera

As can be seen from the diagram, when analyzing the medically important woody species of the *Rosaceae* family by genera, *Rosa*-28%, *Crataegus*-26%, *Pyrus*-11%, *Prunus* and *Rubus*-6%, *Sorbus*-4%, each of the remaining genera is 2% of the total plants.

2. CONCLUSION

1. As a result of the conducted research, the systematic composition of medically important woody species of the family *Rosaceae* was determined and 53 species belonging to 16 genera were noted, and the chemical composition of those species and their areas of use were studied. It was found that among the medicinally important woody plants belonging to the family *Rosa*-15, *Crataegus*-14, *Pyrus*-6, *Prunus* and *Rubus*-3, *Sorbus*-2, each of the remaining genera is represented by 1 species.

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