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**V. TYPE. WATER MARSHES SWAMPS AREAS****8. Formation class. - grassy - swamps**

A. form . gr. – *Junceta*.

A. – a) ass. - *Junceta acutus*

**9. Formation class – Shrubs – Berennial herbaceous wetlands**

B. – form. gr. – (*Tamarixeta – Phragmitetum – Juncosum*)

B. – 1 – a) ass. *Tamarixeta ramosissima - Phragmitesetum australis - Juncosum acutus*.

B. – 1. – b) ass. (*Tamarixatum ramosissima – Phragmitosum australis*

B. 1. – c) ass. *Phragmitetum australis – Juncosum acutus*

**CONCLUSION**

As a result of the analysis of the mentioned formation groups and associations, it was determined that oil-contaminated vegetation on “research objects” in Azerbaijan was represented in 5 vegetation types, 9 formation classes, 9 formation groups and 15 associations. Among them, 1 formation group for semi-desert vegetation (Davetikanli - Mollabashilig) was

discovered for the first time. In general, the results of the phytocological studies we conducted in the vegetation of areas polluted with oil and groundwater in Azerbaijan show that the classification developed for the purpose of biological recultivation for the restoration of primary phytocenoses has important scientific and practical significance.

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## PROSPECTS OF USE OF USEFUL SPECIES OF THE FAMILY ROSACEAE JUSS. FOUND IN FOREST AND SHRUB VEGETATION OF AZERBAIJAN

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**Abstract:** *The article provides detailed information on the prospects for the use of useful species of the family Rosaceae Juss., which is widespread in the flora biodiversity of Azerbaijan due to the number of species. The research was carried out using ethnobotanical research methods - observation, survey, questionnaire and other methods in 2022-2023. It was known that 15 species of the genus Crataegus, Rosa, Geum, Fragaria, Rubus, Sanguisorba, Sorbus, Filipendula, Potentilla, Prunus and Cydonia belonging to the family have a wide area of application among the local population. In terms of use value index (UVi), species such as Crataegus monogyna, Crataegus sanguinea, Rosa canina, Rubus caesius, Rubus saxatilis, Prunus spinosa and Cydonia oblonga are more important and widely used species. So, out of 15 species of medicinal plants, raw materials of 4 species are mainly used during colds, 2 species have a strong diuretic effect. Five species of plants have anti-inflammatory effects as medicinal raw materials.*

**Keywords:** *Rosaceae Juss., useful species diversity, ethnobotanical use.*

### INTRODUCTION

The family Rosaceae Juss. occupies a unique place in the flora, either due to the number of species or a number of useful properties. Representatives of the genus are widespread in several parts of the world, especially in temperate and subtropical countries. More than 2500 species of about 100 genera distributed in the world flora [Sytsma, 2023.], of which up to 195 species belonging to 29 genera are found in Azerbaijan [Asgarov, 2016; Flora of Azerbaijan, 1954]. Its representatives are mainly trees, shrubs, semishrubs, subshrubs and grasses. The rose family are considered a valuable source of raw materials, as they are rich in biologically active substances, in addition to having a number of useful properties, such as feed, dye, medicine, food. Due to the large number of biologically active molecules in its composition, it has a wide range of applications in medicine.

[Lobanova et al., 2004; Novruzov & Shamsizade, 2004]. Discovering new methods of using species with such useful properties has always been relevant. Informations about the practice of beneficial characteristics of the family was obtained from literature sources [Ibragimov, 2016; Vulf & Maleeva, 1969; Ilyina, 2017; Maznev, 2004; Mustafayeva et al., 2013; Ibadullayeva & Huseynova, 2021], and as a result of the long-term ethnobotanical surveys conducted among local communities and new application possibilities were identified.

### MATERIAL AND METHODS

The conducting was carried out using ethnobotanical research methods - observation, survey, questionnaire and other methods in 2022-2023. The survey was conducted among the local population of different age groups and professions. People aged 35 to 70 participated in the survey. Dictaphones and cameras were mainly used during the ethnobotanical

interview. The use value of the data collected was calculated based on the method of evaluating the relative usefulness of plants to people developed by Phillips and Gentry [Phillips et al., 1994.].

Use value for species ( $UV_i$ ):

$$UV_i = \sum U_i / N_i$$

it assumes the ratio of the sum of the number of reports of use ( $U_i$ ) given by each informant for specific plant species to the total amount of information obtained during the interview ( $N_i$ ).

## DISCUSSION OF RESULTS

During the research, some representatives of the family Rosaceae, widely distributed in the territory of the republic and of which use value was assessed by the population as high, were bioecologically and morphologically analyzed and their useful properties (medicine, food, dye, technical and etc.) were substantiated from a scientific point of view. It was known that species of the genus *Crataegus*, *Rosa*, *Geum*, *Fragaria*, *Rubus*, *Sanguisorba*, *Sorbus*, *Fillipendula*, *Potentilla*, *Prunus* and *Cydonia* have a wide area of application among the local population.

*Crataegus* L. – Hawthorn is one of the useful genera represented by the most species of this family. There are 700 species of the genus in the world flora, of which 30 species are found in the flora of Azerbaijan. These are trees or shrubs.



Figure 1. *Crataegus monogyna* Jacq.

Most of its representatives play an important role in the treatment of a number of diseases, including cardiovascular diseases, which rank first in the number of deaths in the world. As is known, at present, for the treatment and prevention of various types of diseases, phytopreparations with high therapeutic activity with minimal danger are used. In the course of many years of research, it became known that preparations derived from hawthorn have proven to be an effective cardiogenic agent and are widely used both in folk and scientific medicine. Anti-tumor and anti-allergy, as well as antimutagenic properties of the plant have been determined. A number of species of the genus are widely used in decorative gardening and landscape design. Most species are melliferous. As for the nutritional value of the genus, we should note that the fruit of the plant is edible as it is rich in vitamins, organic acids, pectin and simple sugars. It is used as tea additive in dry form. As a result of the survey, it became clear that local population prepares different types of compote, jam and jelly from the fruit of the plant [Gubanov et al., 1993; Skvortsov, 2004].

One of the widespread useful species of the genus is *Crataegus monogyna* Jacq.- common hawthorn (Fig.1). The plant is a tree or shrub 3-6, and sometimes 8-12 m high. The species is found naturally in the Greater and Lesser Caucasus, as well as in Nakhchivan AR. It is distributed from the lowland to the middle mountain belt in light forests, forest edges, scattered in groups between thickets.

*Crataegus sanguinea* - redhaw hawthorn, one of the species distinguished for its useful properties, in addition to medicinal properties, also has a very beautiful appearance. It is covered with white flowers in summer and clusters of red berries in autumn. The distribution range is limited only to the territory of Nakhchivan AR. It is a small tree with a height of 3-6 m. Its characteristic feature is drought tolerance and low demand for soil. It is a mesoxerophyte. Its fruit is rich in ascorbic acid and a number of other vitamins.

One of the useful species of the family is rosehips - *Rosa* L. According to the latest literature data, 51 species of the genus occur in

Azerbaijan. They can be found almost everywhere, from the lowlands to the subalpine zone. Mainly distributed on the edge of forests, in thickets, around rivers. Representatives are mainly shrubs. Species of the genus, which have a wide area of uses, have medicinal, food, melliferous, decorative and tanning properties [Sagdullaev, 2003; Ayati et al., 2018].

One of the important species of the genus is *Rosa canina* L. - dog rose. It is a shrub with a height of 1.5-2.5 m. The species can be found almost everywhere in Azerbaijan, from the lowland to the middle mountain belt, along the road, in residential areas, on the edges of forests, and on the banks of rivers. Fruit pulp contains sugar, tans and dyes, protein, pectin substances, and free acids. Its seed contains protein, fat, ash and fiber, and its fruit contains 4-15.5% carotene and vitamin B2 [Rungsung et al., 2015].

*Geum* L. (Avens) Despite the small number of the genus in Azerbaijan, this does not lag behind other genera in terms of usefulness. Of the 30 species of the genus distributed in the world flora, 3 three species are found in Azerbaijan. Representatives of the genus can occur mainly from the lowlands to the middle mountain belt, and sometimes in the upper mountain belt. They are found mainly in forests and thickets, along river banks and moist meadows. It contains essential oil, tanning substances, alkaloids,



Figure 2. *Geum rivale* L.

phenol compounds, carbohydrates [Sokolov, 1990]. For food, young leaves are used in the preparation of various types of salads, and in

folk medicine as an astringent. The stem and leaves are used in the leather tanning industry, and the root in dyeing to obtain red and brown colors.

One of the useful species of the genus that is widely distributed in Azerbaijan is *Geum urbanum* L. - wood avens. It is a perennial herb 30-60 cm tall. The species can be found almost everywhere in Azerbaijan, mainly from the lowland to the middle mountain belt, sometimes in forests and bushes in the upper mountain belt. The tanning substance was found in root and rhizome. Young leaves contain more than 0.1% ascorbic acid. The amount of ascorbic acid changes during the vegetation period.

*Geum rivale* L.- water avens is a perennial herb with thick rhizomes (Fig.2). It is mainly found in moist meadows and riverbanks in the middle and upper mountain belt. The root and rhizome of the plant contain essential oil, and the leaf contains about 100 mg of vitamin C. Like other species of the genus, this species has many useful properties. This species is widely used by local communities for food and medicinal purposes. The plant is considered a valuable source of raw materials for the production of tannin and dyes. Rhizome contains up to 45% of the tanning agent, so it is used for tannin and dyeing the leather.

*Fragaria* L. – Strawberry is one of the useful genera of the family. There are four species of the genus in Azerbaijan, one of which is cultivated.

*Fragaria vesca* L.- wild strawberry is one of the widespread species of the genus. It is a perennial herb. Apart from Nakhchivan AR, it is found almost everywhere in Azerbaijan, on the edges of forests, among bushes. It is distributed from the lowland to the middle, rarely to the upper mountain belt. It is chemically quite rich. The fruit contains ascorbic acid, carotene, vitamin B1, sugar, malic and salicylic acid, tannin and pectin substances, anthocyanin compounds; its leaves - ascorbic acid, tanning agents, alkaloids, carotene and polysaccharides, its seeds - a lot of iron, and its rhizomes - tanning agents in addition to iron. It was determined that the iron element in the fruit part of the plant is 2 times more than that of plums, and 40 times more



than that of grapes. The fruit and leaves of the plant are used as medicinal raw materials.

*Fragaria viridis* Weston - creamy strawberry is spread almost everywhere in Azerbaijan. It is found on grassy slopes and thickets from lowland to mid-mountain belt. The fruit contains sugar (up to 4.5-15%), pectin substances (up to 1-1.7%), tanning agent, ascorbic acid, folate, malic, citric acids, cobalt, phosphorus, zinc and chromium salts and leaves contain 0.16-0.25%, tanning agent, ascorbic acid (250-300 mg%) and traces of alkaloids [Dokuchaeva et al., 2015].

*Rubus* L. – Raspberry is one of the useful genera of this family, and out of 55 species distributed on Earth, 15 species are found in Azerbaijan. Its representatives are mainly perennial herbs or shrubs. Since ancient times, most species of the genus have been widely used as food plants by the population. Its composition is rich in various types of elements.

*Rubus caesius* L. - European dewberry is a bush plant (Fig.3), and found almost everywhere in Azerbaijan, from the plains to the middle mountain belt. It is found mainly in forest edges, irrigation ditches, gardens, along river-



Figure 3. *Rubus caesius* L.

beds. The root, leaves and berries of the plant are used for medicinal purposes. Information about the medicinal properties of the plant was recorded in the works of many scientists (Theophrastus, Avicenna, etc.) since ancient times. It contains glucose, fructose, organic acids, fiber and ash [Swamy & Akhtar, 2019].

*Rubus saxatilis* L. - stone bramble is a perennial grass plant and can be found mainly in the

eastern and western parts, Guba zone of the GC, in the north and center of the LC. Mainly distributed in the upper mountain zone, among thickets, on rocks, in forest and subalpine meadows. It is chemically quite rich. The fruit contains carbohydrates, organic acids, pectin and tannin agents, vitamin C, flavonoids and phytoncides. Alkaloids, tannins, rutin and ascorbic acid were found in the surface part [Gudej et al., 1998].

*Sanguisorba* L. - Burnet is one of the few



Figure 4. *Sanguisorba officinalis* L.

genera of the family. One species of the genus is distributed in Azerbaijan.

*Sanguisorba officinalis* L.- great burnet is a perennial plant (Fig.4). Found in the central part of LC. This species, which spreads in the middle and upper mountain zones, in humid meadows, has a number of useful properties. The rhizome and root of the plant are used medicinally. The root is very chemically rich. It contains 30% tannin, more than 3% saponins, more than 1% essential oil, vitamin C, carotene, dyes, sterols, and essential oil contains flavonoids and ascorbic acid.

According to the latest literature, out of 100 species of the genus mountain ash (*Sorbus* L.) distributed in the temperate zone of the Northern Hemisphere, 14 species are found in Azerbaijan.

*Sorbus aucuparia* L.- field-ash - tree or tall shrub with a height of 6-8 m (sometimes 15 m). It is found singly or in groups, mainly in the eastern and western part of GC, on forest edges, in beech forests, on rocks in the Guba massif. Its

composition is rich in flavonoids, steroids, fatty oils, organic acids, carotenoids, C, P, E vitamins. It is a medicinal, food, decorative, dye and melliferous plant. The fruit of the plant is used for medicinal purposes.

*Filipendula* Mill. (meadowsweet) - out of 10 species distributed in the world flora and in the Caucasus, two species are found in Azerbaijan. Its representatives are perennial grasses.

*Filipendula ulmaria* (L.) Maxim. (meadowsweet) is a perennial herb with a creeping rhizome. Found mainly in humid meadows in the GC (in Guba massif), Lankaran and Nakhchivan mountains. The plant is chemically very rich and is of great interest for medicine. The main group of biologically active substances is phenol compounds (about 119 compounds), especially quercetin glucosides, polyphenol components, and coumarin-type compounds. The amount of ascorbic acid (with 300 mg%) in the above-ground part is quite high.

Representatives of the genus *Potentilla* L. are mainly subshrubs, annual, biennial or perennial herbs. There are 30 species of the genus in Azerbaijan. Most species contain tannins. Some representatives have decorative and medicinal properties.

*Potentilla anserina* L.- common silverweed is a perennial plant and found in the center of LC and Diabar. Occurs mainly in dry places in the middle mountain belt, along the river bank. Its leaf contains 260-297 mg% ascorbic acid, cellulose and fiber. It is a strong medicinal plant [Olennikov et al., 2014].

Of the 10 species of *Prunus* L. (plum) distributed in the world flora, 3 species and 1 subspecies are found in the wild in Azerbaijan, and 4 species are cultivated. Representatives of the genus are mainly trees and shrubs. It contains a large amount of useful substances. In particular, the high content of potassium reduces the risk of cardiovascular diseases (it is a very important element for the normal functioning of the heart). Plum is rich in antioxidants (anthocyanin, ascorbic acid, carotenoid, vitamin B).

*Prunus spinosa* L. (blackthorn) is a vigorous branching shrub or short tree. Widespread in many areas of Azerbaijan. It is mainly found from the lowland to mid-mountain belt, among

thickets, along forest edges and along river valleys. It has a number of useful properties [19]. However, people suffering from gastritis and ulcers are advised to stay away from this fruit as much as possible.

*Cydonia* Mill. - quince genus is represented by 1 species in the world flora.

*Cydonia oblonga* Mill. (quince) - a small tree or shrub 1.5-5m tall. It can be found almost everywhere in Azerbaijan. Found from the lowland to the lower mountain belt, on forest edges, among thickets, singly or in groups. Its composition is rich in many vitamins and minerals [Weiss & Fintelmann, 2004]. It has an effective effect in the treatment of a number of diseases.

Based on the ethnobotanical surveys conducted among the population, the practical ways of using the above-mentioned species were determined, and the relative value was calculated based on the results of the informants (Table).

It was found that each of the 15 studied species was of practical importance in one way or another and had a wide range of uses. So, out of 15 species of medicinal plants, raw materials of 4 species are mainly used during colds (*Crataegus sanguinea*, *Rubus saxatilis*, *Cydonia oblonga* and *Rosa canina*). *Fragaria vesca* and *Potentilla anserina* species have a strong diuretic effect. Fruits of 3 species (*Sorbus aucuparia*, *Rubus saxatilis*, *Fragaria vesca*) are used as vitamin plants. Five species of plants have anti-inflammatory effects as medicinal raw materials (*Geum urbanum*, *Geum rivale*, *Fragaria vesca*, *Sanguisorba officinalis* və *Filipendula ulmaria*). Two species - *Filipendula ulmaria* and *Potentilla anserina* are used as medicinal raw materials for diseases of the gastrointestinal tract. *Geum urbanum*, *Geum rivale* and *Potentilla anserina* species have an effective effect in rheumatism. *Rubus saxatilis* and *Sanguisorba officinalis* species are widely used in folk medicine in the treatment of a number of women's diseases, and *Crataegus monogyna*, *Crataegus sanguinea*, *Filipendula ulmaria* and *Rubus saxatilis* species in the treatment of cardiovascular system diseases.



**THE MAIN DIRECTIONS OF THE PRACTICAL USE OF SOME SPECIES OF THE ROSACEAE FAMILY**

<b>№</b>	<b>Name of the species</b>	<b>Use in medicine</b>	<b>Nutritional importance</b>	<b>Technical importance and other areas of use</b>
1.	<i>Crataegus monogyna</i> Jacq. -common hawthorn UVi = 0,43	Its flowers and fruits are used in nervous system and cardiovascular diseases.	The fruit is nutritious. It is rich in vitamins, organic acids, pectin and simple sugar. It is added to tea when dried. Different types of compote, jelly and jam are prepared.	It is used in the construction of living fences in parks and gardens. Red, yellow and brown dyes are obtained from branches, bark and shoots. Melliferous plant.
2.	<i>Crataegus saguinea</i> – redhaw hawthorn UVi = 0,32	In folk medicine - in cold, suffocation accompanied by heart failure, cough, lung diseases, in scientific medicine, it is widely used in the treatment of cardiovascular diseases as a cardiotonic and hypotensive agent.	Fruits are nutritious. Different types of jam and kissel are prepared. Used as a tea substitute. Crushed fruit is added to flour to make sweet dough.	Hard wood is used in the production of turnery. Decorative plant (especially during flowering and in autumn). Used in the construction of living fences. The bark is used as a tanning agent, dyes the fabric red. Yellow and brown dye for fabric is obtained from the bark and root.
3.	<i>Geum urbanum</i> L. – wood avens UVi = 0,19	Inflammation of the mucous membrane of the stomach, constipation, insomnia, purulent wounds, eye diseases, rheumatism, hemorrhoids.	Different types of salads, purees and soups are prepared from the above-ground part.	It is used in tanning the leather and dyeing the cloth in a reddish-brown color. Favorite food of animals.
4.	<i>Geum rivale</i> L. – water aven UVi = 0,13	Inflammation of the mucous membrane of the stomach, purulent wounds, constipation, insomnia, eye diseases, rheumatism, hemorrhoids, etc.	The leaves and shoots are edible, various types of salads and soups are prepared, and the root is used as an additive.	Used for tanning and dyeing leather. It dyes the fabric reddish-brown. The aerial part is eaten by domestic animals, some wild animals and birds.
5.	<i>Fragaria vesca</i> L. – wild strawberry UVi = 0,16	Diuretic, as a general stimulant for the regulation of intestine activity, in inflammatory diseases of the stomach and biliary tract, and in gout.	Different types of jelly, compotes and jams are prepared, leaves are brewed as tea.	It is a favorite food of cattle, sheep and pigs.
6.	<i>Fragaria viridis</i> Weston -creamy strawberry UVi = 0,22	Diuretic, hemostatic, astringent and anti-inflammatory. Improves the functioning of the digestive system, and recommended for use during avitaminosis hypertension, constipation and gout.	Different types of jams, compotes and jams are prepared, and used to decorate different types of desserts.	The berries are eaten by deer.
7.	<i>Rosa canina</i> L.- dog rose UVi = 0,36	In folk medicine, tea made from the fruit of the plant has an effective effect in the treatment of colds, highmoritis, diseases of the oral cavity, as well as cardiovascular and gastrointestinal diseases, its seeds are effective in urinary tract stones, rheumatism and gout.	The soft part of the fruit is eaten.	It is a strong tanning agent (root, stem, leaf). It is eaten by many farm animals besides horses. It is a favorite food of goats and rabbits. Widely used to create green spaces as an ornamental plant. Melliferous plant.
8.	<i>Rubus caesius</i> L.- European dewberry UVi = 0,44	The infusion obtained from the juice of the root is mainly used in liver diseases, colitis, haemorrhoidal bleeding; the above-ground part is used for colitis, dysentery, and the decoction and infusion of the leaves are used for gastritis, anemia, etc.	Different types of jelly, fruit paste, marmalade and jam are made from its fruit.	Decorative plant

9.	<i>Rubus saxatilis</i> L. – stone bramble UVi = 0,37	Infusion and alcoholic solution are used for women's diseases, stenocardia, headaches, gout, respiratory diseases, neurosis and neuralgia.	Kissel, gelatine, jam and fruit drink are made from berries. Its fruits are used in the preparation of confectionery and alcoholic beverages.	The leaves are eaten by cattle
10.	<i>Sorbus aucuparia</i> L. – mountain ash UVi = 0,19	Polyvitamin	Different types of jelly, compotes and jams are prepared. Its fruits are used in the preparation of confectionery and alcoholic beverages.	Decorative, dyeing and melliferous plant.
11.	<i>Fillipendula ulmaria</i> (L.)- Maxim. – meadowsweet UVi = 0,18	Infusion - for nervous system diseases, vascular strengthening, anti-inflammatory, nephritis, cystitis and hemorrhoids	Young shoots are used as a salad. Tea drink is prepared from its flower.	The root is rich in tannin, so it can be used in the tannin industry. Melliferous plant.
12.	<i>Potentilla anserina</i> L. - common silverweed UVi = 0,23	Dysentery, diarrhea, kidney stone disease, hernia, scurvy, angina, stomatitis, colitis, headaches, migraine, rheumatism, arthritis etc. In folk medicine, the plant is widely used in homeopathy.	Added to food as an additive	It dyes the cloth in light, black-brown and sand colors. The above-ground and underground organs contain tannin substances.
13.	<i>Prunus spinosa</i> L. – blackthorn UVi = 0,35	The solution obtained from the flower improves metabolism, tea made from flowers and leaves is used for blood purification, cough, urinary incontinence, juice - especially in children with rashes of various etiologies. In scientific medicine, it is used for eye diseases.	Jelly, jam, marmalade, various types of drinks and liqueurs are made.	The root contains dyes and tannins.
14.	<i>Sanguisorba officinalis</i> L.- great burnet UVi = 0,24	It is an astringent, anti-inflammatory, hemostatic, analgesic and bactericidal agent. In folk medicine, the extract and infusion of the plant have an effective effect on various types of hemorrhoid and internal bleeding.	Young leaves are added to soup, salad is prepared. It is used as an astringent tea.	It has dye and tanning properties.
15.	<i>Cydonia oblonga</i> Mill. – quince UVi = 0,67	In folk medicine, seeds are used for cough, respiratory diseases, reduce the risk of cancer, constipation; ripe fruit is used in tuberculosis, bronchial asthma, gastrointestinal disease. Fresh fruits are considered diuretic and choleric.	It is mainly used in cooked form. Different types of soft drinks, compote, jelly, jam, marmalade are prepared.	It is suitable for creating live fences as a decorative plant

Only one of the studied species - *Prunus spinosa* - has an effective effect in the treatment of various skin diseases, especially skin rashes of various etiologies in children.

Both studied species of the genus *Geum* are widely used in folk medicine, while *Prunus spinosa* is widely used in scientific medicine to treat a number of eye diseases. *Geum urbanum*, *Geum rivale*, *Fillipendula ulmaria* and *Rubus caesius* species have a curative effect during haemorrhoids. Medicinal raw materials of *Geum urbanum* and *Geum rivale* species are used to heal various types of wounds, especially purulent wounds. *Potentilla anserina* and *Fillipendula ulmaria* species have an effective effect in kidney diseases, and *Rubus caesius* in liver diseases. Both *Rosa canina* and *Fragaria* species are effective in gout. In terms of usage value, species *Crataegus monogyna*, *Crataegus saguinea*, *Rosa canina*, *Rubus caesius*, *Rubus saxatilis*, *Prunus spinosa* and *Cydonia oblonga* are more important and widely used species.

Most of the 15 studied species belong to the group of food plants. Most of these species are

either added to food raw or various compotes, jams, jelly and syrups are made. The rhizome of *Sanguisorba officinalis* species is used to make astringent tea. The leaves of the species *Potentilla anserina* are added to food as a spice. The aerial parts of *Geum urbanum* and *Geum rivale* species are used in the preparation of various types of salads, soups and purees.

#### CONCLUSION

Most of the representatives of the family are decorative plants, widely used in the greening of cities and towns and in the construction of living fences. Some species (*Geum urbanum*, *Geum rivale* and *Potentilla anserina*) are used for technical purposes in leather tanning. Raw materials of 3 species (*Geum urbanum*, *Geum rivale* and *Potentilla anserina*) are used in fabric dyeing. As fodder, the leaves of the *Fragaria vesca* and *Rubus saxatilis* species are food of cattle, sheep and pigs, and the berries of *Fragaria viridis* are of deer. From all this, it can be concluded that the same species can be effective in the treatment of various diseases and have wide practical importance in a number of fields.

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