

MEDICINAL PLANT DIVERSITY IN THE FLORA OF RÂIOSU AND BUDA MOUNTAINS

DANIELA ILEANA STANCU

Argeș County Museum, Armand Călinescu Street, no. 44, 110047, Pitești, Argeș, Romania,
e-mail: stancuileana@yahoo.com

ABSTRACT. In the paper we presented medicinal plants from Râiosu and Buda Mountains, Făgăraș Massif. Not surprisingly, the largest families contain the largest number of medicinal species. It is essential to make the complete inventory of the medicinal component of the flora of any mountain for conservation and sustainable use. This fact requires an efficient management of the two mountains where they vegetate.

Keywords: medicinal plant, flora biodiversity, Râiosu and Buda Mountains.

REZUMAT. Diversitatea plantelor medicinale din munții Râiosu și Buda, Masivul Făgăraș. În lucrare sunt prezentate speciile de plante medicinale, din munții Râiosu și Buda, Masivul Făgăraș. Deloc surprinzător, familiile cele mai mari conțin cel mai mare număr de specii medicinale. Este esențial să se realizeze inventarul complet al plantelor medicinale din fiecare munte pentru conservarea și folosirea lor pe termen lung. Acest fapt necesită un management eficient al celor doi munți unde acestea vegetează.

Cuvinte cheie: plante medicinale, biodiversitatea florei, munții Râiosu și Buda.

INTRODUCTION

Râiosu and Buda Mountains has one of the richest flora biodiversity. Medicinal plants represent an important health and economic component of biodiversity. It is essential to make the complete inventory of the medicinal component of the flora of any mountain for conservation and sustainable use.

The conservation of the threatened and endangered medicinal species in the wild is indispensable. The complete inventory of the medicinal plant resources is a very hard work, but we hope that this will be the beginning.

MATERIALS AND METHODS

The study presents a part of the medicinal plants diversity analysis and determines their status in the wild for their conservation priorities.

It was given popular names, location in the studied area and medicinal properties and uses of the plants species (Ciocârlan V., 2009).

RESULTS AND DISCUSSIONS

An enumeration of these 83 medicinal plant species is presented with the current nomenclature, popular names and medicinal uses. This communication aims at emphasizing the importance of setting up conservation priorities, and sustained development of various medicinal plants of Făgăraș Massif.

The objective is to emphasize the importance of setting up conservation priorities and sustained development of various medicinal plants of Râiosu and Buda Mountains.

Lycopodiaceae

Huperzia selago (L.) Bernh. ex Schr. & C.F.P. Mart. - common in grassy places from subalpine and mountain region in Râiosu Mountain. Internal use for these affections: kidney stones, alcoholism, smoking, gallstones. External use: dermatitis, eczema, psoriasis, alopecia.

Lycopodium clavatum L. (wolf's claw) - found in the forest edge, Râiosu River Valley. It has diuretic properties, antitumor, anti-rheumatic, combat hair loss and is effective against sweating. External use: dermatitis, eczema, burns, open sores, rheumatism, muscle cramps.

Equisetaceae

Equisetum arvense L. (horsetail) - common on valley Buda forest roadside. It has antiseptic, antimicrobial, diuretic, depurative properties, activate local circulation, rich in minerals strengthens bones and teeth, prevents atherosclerosis, has antacid effect in the stomach and healing. External use: eczema, abscess, epistaxis.

Ophioglossaceae

Botrychium lunaria (L.) Swartz (love grass) - seen at Buda Lake and in Râiosu Mountain, on the road to the Polița lui Voda. It has astringent and tonic properties and it heals wounds.

Aspleniaceae

Asplenium scolopendrium L. (deer's tongue) - it was seen in the Buda Valley. Internal is used as a tea to cure lung diseases, relieve cough, lowers fever, biliary dyskinesia efficiency. External is used to treat wounds quickly and efficiently, seborrhea, acne.

Aspidiaceae (Dryopteridaceae)

Dryopteris filix mas (L.) Schott (fern) - seen on the Buda Valley and river valley Râiosu. Internal is used to treat intestinal parasitosis.

MEDICINAL PLANT DIVERSITY IN THE FLORA OF RÂIOSU AND BUDA MOUNTAINS

Polypodiaceae

Polypodium vulgare L. (sweet fern) - it was seen in the forest along the Buda Valley and in the forest leading to the sheepfold of Râiosu Mountain. It has expectorant and mucosolvente properties.

Pinaceae

Abies alba Miller (fir) - met in Buda and Râiosu Mountains. It has antiseptic lung properties, cough, analgesic, expectorant, tonic properties.

Picea abies (L.) Karsten (pine) - met in Buda and Râiosu Mountains. It has antiseptic lung properties, cough, analgesic, expectorant, tonic properties. Nectar glands secretions of these trees are collected by bees. So, they are valued in apitherapy.

Pinus mugo Turra (juniper) - met in Buda and Râiosu Mountains, to alpine level. Juniper is indicated in cases of rheumatism, arthritis, osteoarthritis, osteoporosis, bronchitis, cystitis, kidney stones.

Pinus sylvestris L. (pine) - it was seen in the forest along the Buda Valley and in the forest leading to the sheepfold of Mount Râiosu. The pine is recognized for its bronchial disinfectant qualities, decongestant, anti-rheumatic, antiseptic, diuretic, anti-inflammatory, antimicrobial, sedative, calming.

Cupressaceae

Juniperus communis L. (juniper) - met in Buda and Râiosu Mountains. Juniper has diuretic, antiseptic, relaxing, sedative action.

Ranunculaceae

Ranunculus ficaria L. (pilework) - it was seen in the forest along the Buda Valley. Used against hemorrhoids, difficult digestion, allergies, acne, varicose veins. Leaves are use in salad only to the flowering plant. After flowering become toxic.

Papaveraceae

Chelidonium majus L. (celandine) - met on the Buda Valley and on the Râiosu River Valley. Herbal therapy is recommended to liver disease, in wound healing of skin diseases, in the treatment of warts, constipation, rheumatics.

Chenopodiaceae

Chenopodium bonus-henricus L. (shepherd spinach) - met to the sheepfold of Râiosu Mountain, to the marble quarry on the Buda Mountain. It has mineralized, vitaminizante, depurative, emollient and laxative properties.

Amaranthaceae

Amaranthus retroflexus L. - met on the Buda Valley. It plays an important role in the cardiovascular diseases treatment. It has anti-hemoragic, astringent, antioxidant role. Used in tumors eradicating and metastases growth reduced.

Polygonaceae

Polygonum bistorta L. - met on the Buda Lake. It has astringent, antiseptic and hemostatic effects. It is indicated for urinary incontinence, diarrhea, stomach pain, enteritis, hemorrhoids and thrush.

Rumex acetosella L. (rabbit watercress) - met on the subalpine meadows of the Buda Mountain. It has diuretic, anti-scorbutic and diaphoretic properties. Recommended in the treatment of dysentery, tuberculosis, hemorrhoids, kidney and urinary tract diseases.

Rumex alpinus L. - met in Râiosu and Buda Mountains. It has purgative, healing astringent, laxative properties. Also stimulates digestion.

Fagaceae

Fagus sylvatica L. (beech) - Buda Valley met. It is recommended in rheumatic fever, diarrhea, fermentation colitis, kidney stones, fluid retention, pulmonary emphysema, eczema, wounds and epilepsy.

Betulaceae

Alnus glutinosa (L.) Gaertner (alder) - Buda Valley met. Internal used as tea for stomach problems including bleeding, stomach pain, enteritis, fever. External is used for dermatological affections, stomatitis, ulcers, cuts, rheumatism.

Betula pendula Roth. (birch) - met on the Râiosu flagstone. It has diuretic, bacteriostatic, anti-inflammatory, perspiration action. It stimulates the gastric juice secretion, gall and digestive intestinal yeast. Treat warts.

Ulmaceae

Carpinus betulus L. (hornbeam) - Buda Valley met. Used in respiratory diseases, chronic sinusitis, irritable bowel syndrome, colitis, enterocolitis, liver failure.

Urticaceae

Urtica dioica L. (nettle) - seen on the Buda and Râiosu Mountains. It is indicated in rheumatic and metabolic diseases and kidney stones. It is anti-inflammatory, healing, hypoglycemic, anti-anemic.

Juglandaceae

Juglans regia L. (walnut) - Buda Valley met and in the forest to the Râiosu Mountain sheepfold. Walnut leaves had anti-inflammatory, antiseptic, astringent, diabetes, hypertension, antiperspirant, healing properties.

Grossulariaceae

Ribes uva-crispa L. (gooseberry) - Râiosu Mountain met. It has effects in rheumatic diseases, gout, heart diseases, regulates digestion, it is cleansing and laxative.

MEDICINAL PLANT DIVERSITY IN THE FLORA OF RÂIOSU AND BUDA MOUNTAINS

Crassulaceae

Sedum telephium L. - Buda Valley met. It has anti-inflammatory, hemostatic, antimicrobial, astringent, fortified, cytostatic, antitumor, healing effects.

Rosaceae

Alchemilla xanthochlora Rothm. (Lady`s Mantle) - met on the Buda and Râiosu mountains. Is antiseptic, anti-inflammatory, anti-hemoragic, antifungal.

Crataegus monogyna Jacq. (May bush) - Buda Valley met. It is acting sedative, antispasmodic, vasodilator, hipotensive.

Geum urbanum L. (bennet) - met near the Râiosu Mountain sheepfold. It is an herb prized as a natural remedy primarily on diseases of the stomach and intestines. It acts as a calming, healing, disinfectant, bactericide, astringent, helps blood to clot faster lighten pain.

Malus sylvestris (L.) Miller (wild apple) - met on the Buda Valley. It takes action on the circulatory system, hormonal system, digestive system, urinary system, osteoarticular system, on the skin.

Potentilla anserina L. (corkscrew) - met on the Buda and Râiosu mountains. It is used in the treatment of the stomach diseases, anemia, arthritis, bleeding and mouth diseases.

Potentilla erecta (L.) Rauschel (germander) - met on the Buda Mountain. It has astringent, antimicrobial, hemostatic, healing, anti-inflammatory, digestive action.

Prunus spinosa L. (blackthorn) - met in the forest on Buda Valley. It is used as a diuretic, sedative, slightly laxative, tonic, anti-diabetic, astringent, anti-asthmatic.

Rosa canina L. (brier) - met in the forest on Buda Valley. Due to its high natural vitamin it used as fortified. It is used to treat colds, the flu, as a general tonic and stimulant. Stimulate appetite and digestion.

Rubus caesius L. (blackberry) - met on the Buda Valley. It has astringent, antiseptic, anti-diarrheal, diuretic, anti-inflammatory actions.

Rubus idaeus L. (raspberry tree) - met to Râiosu Mountain sheepfold. It has astringent, anti-diarrheal, diuretic, cleansing, laxative action. It decreases gastric acidity.

Sanguisorba minor Scop. - met to Râiosu Mountain sheepfold. It has astringent, healing, hemostatic action. It is used in gastrointestinal and urinary disorders.

Sorbus aucuparia L. (rowan) - met in the forest on the Buda Valley. It is used as a diuretic, anti-tussive, hemostatic, anti-scorbutic.

Fabaceae

Lotus corniculatus L. - met on the Râiosu belt. It has antispasmodic, sedatives and has immunostimulatory effects. Have positive contributions in the fight against brain excitations, the states of stress, insomnia, nervous agitations,

depressive states and in some cardiovascular disorders or substance nervous disorders of the digestive system.

Medicago sativa L. (lucerne) - met on the Buda Mountain. It has hemostatic, anti-anemic, re-mineralizing properties.

Melilotus officinalis (L.) Pallas (melilot) - met on the Buda Valley. It has anti-coagulant, diuretic, anti-spasmodic, anti-inflammatory, sedative, astringent action. Regenerate liver tissue.

Trifolium pratense L. (red clover) - met in the Buda Mountain pastures. It is used in cases of cold or flu and gastrointestinal controlling pain.

Trifolium repens L. (shamrock) - met on Buda Valley. It has anti-viral, anti-bacterial, anti-asthmatics, anti-rheumatic effects.

Oxalidaceae

Oxalis acetosella L. (rabbit's watercress) - met in the forest on Buda Valley. It is used in spring fatigue, vitamin deficiency, chronic liver disease, digestive disease, heavy metal poisoning.

Polygalaceae

Polygala vulgaris L. (bird's eye) - met on Buda Mountain. Used in asthma treatment, arthritis, rheumatism, respiratory diseases.

Apiaceae

Angelica archangelica L. - met on Buda Valley near the brook. It is used in the stomach disorders, stimulating appetite, indigestion, cough, common cold, bronchitis, thrombosis.

Carum carvi L. (cumin) - met on Buda Mountain. It is antiseptic, astringent, antimicrobial. It is highly recommended in digestive disorders.

Heracleum sphondylium L. (heracleum) - common Râiosu River Valley to the sheepfold. Used in renal failure, hypertension, epilepsy, anorexia, infertility, sexually transmitted diseases, impotence.

Hypericaceae (Guttiferae)

Hypericum perforatum L. (rattle) - met on Buda Valley. It is recommended for digestive disorders, fluid retention, hypertension, neurovegetative dystonia, panic attacks.

Violaceae

Viola tricolor L. (three stained brothers) - met on the Râiosu Mountain. It has anti-allergic action. It is used in bronchitis, cystitis, autoimmune disorders, rheumatic disorders, dermatitis, cardiac diseases and acne.

MEDICINAL PLANT DIVERSITY IN THE FLORA OF RÂIOSU AND BUDA MOUNTAINS

Brassicaceae (Cruciferae)

Capsella bursa-pastoris (L.) Medicus (shepherd's purse) - met on Buda Valley. It has haemostatic, vasoconstrictor, antimicrobial, antibacterial, antifungal, antitumor action.

Cardamine pratensis L. - met on the Râiosu Mountain. It has antirheumatic, sedative properties. It stimulates the liver and kidney.

Isatis tinctoria L. - met on the Râiosu Mountain. It has antibacterial, antiviral, anticancer action. It is used to treat laryngitis, fever, hepatitis and encephalitis.

Salicaceae

Salix alba L. (willow) - met on the Buda Mountain. Used in rheumatic diseases, in fever, anxiety, insomnia combating. It has therapeutic action neuralgia, muscle pain, stomatitis.

Tiliaceae

Tilia cordata Mill. (linden) - met on the Râiosu River Valley. It is acting sedative, antispasmodic, diuretic. It is indicated in gallstones, in digestive disorders.

Cornaceae

Cornus mas L. (horn) - met on Buda Valley. Natural remedy for an upset stomach, stomach cramps, liver disease, eczema, intestinal worms, myopia.

Ericaceae

Rhododendron myrtifolium Scott et Kotschy (mountain peony) - met in Buda and Râiosu mountains. It is used in liver diseases, respiratory diseases.

Vaccinium myrtillus L. (bilberry) - met on Buda Mountain, to Buda Lake. Used in urinary tract infections in liver disease, diabetes, circulatory diseases, rheumatic diseases.

Vaccinium vitis-idaea L. (cranberry) - met on Buda Mountain, to Buda Lake. It is anti-inflammatory, antiseptic, astringent, diuretic. It has maximum efficiency in treating uro-genital infections.

Primulaceae

Primula veris L. (primrose) - met on Buda Mountain. It is healing, expectorant. It is used to treat urinary stones, rheumatism, fever, flu, anemia, insomnia, laryngitis.

Asclepiadaceae

Vincetoxicum hirundinaria Medicus (milkweed) - met on Buda Valley. It has anti-helminthic, expectorant and diuretic qualities. Effective on skin diseases, wounds, cuts.

Rubiaceae

Galium odoratum (L.) Scop - met on Buda Mountain. It is used as a tonic for the heart and liver in treating the kidney, diseases of the pancreas, spleen, and in calming nerves, tachycardia, insomnia and heart rate regulation.

Galium verum L. - met on Buda Valley. It has diuretic, cleansing, astringent, healing, anti-inflammatory, sedative, calming, antispasmodic effect.

Oleaceae

Fraxinus excelsior L. (ash) - met on Buda Valley. It is recommended to treat rheumatism, poisoning, gout, diabetes, constipation, acne, intestinal worms, gastric and duodenal ulcers.

Ligustrum vulgare L. (wooden dog) - met on Râiosu Mountain. External is used to treat thrush, anginas, dermatitis, pressure sores, hemorrhoids, inflammation of the mouth, gynecological inflammation, stomatitis.

Caprifoliaceae

Sambucus nigra L. (elder) - met on Buda Valley. It has sudorific, diuretic, emollient, rheumatic, anti-nevralgic, laxative action.

Valerianaceae

Valeriana officinalis L. (valerian) - met on Buda Valley. It has sedative properties on the nervous system and antispasmodic action.

Boraginaceae

Anchusa officinalis L. (ox tongue) - met on Buda Mountain. It has diuretic, emollient, antibiotic, anti-inflammatory, healing, expectorant, digestive, analgesic qualities.

Pulmonaria officinalis L. (lungwort) - met on Buda Valley. Is acting emollient, anti-inflammatory, healing, analgesic, expectorant and antispasmodic.

Scrophulariaceae

Veronica officinalis L. - met on the Râiosu Mountain. It is used to treat digestive diseases, in the treatment of anemia, hypertension, bronchitis, rheumatism and gout, is the blood purifier.

Plantaginaceae

Plantago major L. (plantain) - met on Râiosu Mountain to the sheepfold. It is one of the oldest medicinal plants used by humans. It has bacterial and antiseptic effects, anti-inflammatory and healing, emollient, expectorant, anti bleeding.

Lamiaceae (Labiatae)

Lamium galeobdolon (L.) Nath. (yellow dead nettle) - met on Buda Valley. Mainly used in urinary tract diseases. It is used also in digestive disorders, skin rashes.

MEDICINAL PLANT DIVERSITY IN THE FLORA OF RÂIOSU AND BUDA MOUNTAINS

Salvia pratensis L. (field sage) - met on Buda Valley. Since ancient sage has fame as a panacea, considered one of the most powerful digestive and nerve tonic. Recommend as combat fatigue and debilitation nerve weakness, poor appetite, tiredness, depression, tremors and paralysis of limbs.

Thymus pulcherimus Schur (thyme) - met on Buda Mountain. It used to treat whooping cough, bronchitis, other respiratory diseases, in the treatment of anemia, in detoxification.

Asteraceae

Achillea millefolium L. (milfoil) - met on Râiosu Mountain to the sheepfold. It is an herb prized as a natural remedy for many conditions since ancient times. It is used in the treatment of stomach, intestine, bladder, gall bladder diseases. It is anti-inflammatory, disinfectant, expectorant, soothing gastric tissue regenerator.

Artemisia vulgaris L. (wormwood) - met on Buda Valley. Herb is effective in treatment of sleep disorders, neurosis, uterine colic. It is the best disinfectant.

Carduus kernerii Simonkai (thistle) - met on the Râiosu Mountain. It has hepato-protective action, toning, detoxifying, antioxidant, immune-stimulatory geriatric.

Cirsium arvense (L.) Scop. (pelamid) - met on Buda Mountain. It has tonic, diuretic, astringent, hepatic action.

Petasites hybridus (L.) P. Gaertner (butterbur) - met on Buda Valley and on Râiosu Mountain to the sheepfold. Used in treating asthma, cough, hypertension, rheumatic diseases, biliary dyskinesia, migraine, hyperthyroidism, anxiety.

Taraxacum officinale Weber. (dandelion) - met on Buda Mountain. It is recommended in hepato-biliary disorders, in painful digestive disorders, liver failure, cholecystitis, biliary inflammation. Reduce gastric acidity, enhances diuresis, detoxifies the body, it helps to restore and maintain endocrine balance.

Tussilago farfara L. (coltsfoot) - met on Buda Valley. Preparations of leaves and flowers have emollient, tonic, antispasmodic, secretolytic, anti-inflammatory. It is used in respiratory diseases, in hepato-biliary dyspepsia, wound and skin ulcers.

Poaceae

Anthoxanthum odoratum L. (vernal grass) - met on Buda Mountains. It has a soothing effect on the body. Flowers are a cure for diseases of the liver and spleen. It regulates blood circulation and heart function.

CONCLUSIONS

Râiosu and Buda Mountains from Făgăraș Massif are home to many medicinal plants whose therapeutic effect has been known since ancient times.

It is important that these plants are known and protected, given the frequent increasingly of deforestation that occur in our mountains and overgrazing which is also a factor as harmful to flora and vegetation of our mountains.

REFERENCES

- BOȘCAIU N., COLDEA Gh., HOREAN C., 1994 - *Lista roșie a plantelor vasculare dispărute, periclitare, vulnerabile și rare din România*. Ocrotirea Nat. Med. Înconj. București. **38 (1)**: 5-56.
- CIOCÂRLAN V., 2009 - *Flora ilustrată a României*. Ed. Ceres. București. 1139 p.
- STANCU D. I., 2005 - *Flora și vegetația munților Râiosu și Buda, masivul Făgăraș*. Ed. Universității din Pitești. Pitești. 226 p.