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Use of Wild Plants at Dermatoses (Skin Diseases): Ethnobotany

Ibadullayeva S.J., Shahmuradova M., Gahramanova M. and Aliyeva Sh. G

ABSTRACT

Data about 23 species of wild plants spread in the Azerbaijan flora and widely used in folk medicine (at skin diseases) during Ethnobotanical Researches have been acquired: *Lycopodium clavatum* L., *Pinus sylvestris* L., *Quercus robur* L., *Morus alba* L., *Rheum rupestre* Litv., *Chelidonium majus* L., *Ribes nigrum* L., *Rosa canina* L., *Filipendula ulmaria* (L.) Maxim., *Agrimonia eupatoria* L., *Melilotus officinalis* (L.) Pall., *Peganum harmala* L., *Hypericum perforatum* L., *Hippophae rhamnoides* L., *Origanum vulgare* L., *Plantago major* L., *Viburnum opulus* L., *Bidens tripartita* L., *Sambucus nigra* L., *Tussilago farfara* L., *Helichrysum plicatum* DC., *Tanacetum vulgare* L., *Matricaria chamomilla* L., *Taraxacum officinale* Wigg., *Verbascum densiflorum* Bertol., *Centaureum umbellatum* Gilib. Areas and biological features of these plants, parts used as medicine and phases of plants have been specified and their medicinal significance and curative properties defined on the result of the complex researches executed in 2007-2011. Wild medicinal herbs collected for cure of dermatovenereological diseases bore great interest. On the result of the researches executed below information related to the use of bioecological and phytotherapeutic properties of some wild plants especially at dermatovenereology including other diseases were provided. It's been known a part of the studied plants takes a wide range in the flora and it's possible to use them as a biological base of raw materials. Some plants are threatened as they're collected unlimitedly. Taking into account in-situ collections of such plants have been created and the seeds collected were reintroduced in their initial natural populations.

Keywords: folk medicine, medicinal plants, dermatosis.

Ibadullayeva S.J., Aliyeva Sh.G
Ethnobotany Lab, Institute of Botany
of the Azerbaijan National Academy of
Sciences, Baku, Azerbaijan

Shahmuradova M.
Lecturer, Azerbaijan State Agrarian
University, Ganja, Azerbaijan

Gahramanova M.,
Head Physician, Central Clinic Cure
by Natural Methods 'Nargiz', Baku,
Azerbaijan

For Correspondence
Ibadullayeva S.J.
AZ1073, 40, Badamdar shosse,
Baku, Azerbaijan,
Tel: +9940125024431,
Fax: +9940125381164

INTRODUCTION

Since the ancient period human being widely used nature, i.e. vegetable kingdom for curative purposes of occurred diseases. While being in connection with the vegetable kingdom people have studied its useful aspects and used it. As a result of thousands of observations carried out by the peoples of the world curative significance of wild plants has been studied (Turova, 1984) and physicians treated people by means of herbs in the regions (Damirov, 1970).

Though tenth of books have been written in Azerbaijan by the specialists dealing with use of herbs (Damirov et al., 1988; Kerimov et al., 1996; Ibadullayeva et al., 2010; 2011; Mamedova et al., 2011) according to the published articles there are also such herbs in our flora that are not being met in any source of literature yet. That is why ethnobotany surveys have been carried out during the last 5 years' expeditions concerning to ecoprotective effects of plants that would give to the indigenous population and conversations have been done with them. On the result certain prospects of wild plants in the regions were determined.

387 plant species were used by physicians in the Middle Age Azerbaijan medicine; unfortunately 252 species (69%) out of the existing ones in present-day Azerbaijan medicine were not accessed into the pharmacopoeia. Only 135 species like official herbs have been introduced. More than 400 plant species out of more than 4500 wild plants belonged to 150 families and 1000 genera met in the Azerbaijan flora are being used in folk medicine. The herbs collected for cure of dermato-venereological diseases including suppuratives, scabs and eruption generate a special interest.

MATERIALS AND METHODS

Research object are medicinal herbs used at skin diseases by ancient Azerbaijanis. This information is based on ancient folk medicine and some of them are being used at today's phytotherapy at present. While studying bio-ecological and phytotherapevical features of the wild herbs classic and current methods were used (Zayko et al., 2007; Krilova and Shreter, 1971). About 30 natural

populations have been selected, plant spreading appropriateness were observed as well as certain arrangements concerning to their collection were implemented during the expeditions. Lifestyles of the herbs have been determined (Serebryakov, 1964; The Azerbaijan flora, 1950-1961) and their use areas were investigated (Prilipko, 1965; Rossiyskiy, 1964; Present-day phytotherapy, 1988; Sokolov, 2000).

RESULTS

Complex researches to identify ethnic use of food and MAP and all useful plants in general have been carried out in 2007-2011; the acquired data were registered as well as new use potentialities of more than 100 wild plans were appeared through consultations with physicians and local people (Ibadullayeva et al., 2010; 2011). The wild medicinal herbs collected for cure of dermato-venereological diseases bore a great interest. On the result of the researches carried out below information related to the use of bio-ecological and phytotherapeutic properties of some wild plants especially at dermato-venereological diseases including their use at other diseases was provided (table1).

On the result of the carried out investigations it has been known that a part of the studied plants takes a wide range in the flora and it is possible to use them as a biological base of raw materials.

However, there are some plants that are threatened as they are collected without any limit. Taking into account in-situ collections of such plants have been created and the seeds collected were reintroduced in their initial natural populations.

Table. 1: Bioecological and ethno-pharmacological properties of some wild herbs.

No	Names of species in Latin	Regions that the species are met	Blooming and insemi-nation periods	Lifestyle	Ecological peculiarities	The part used on medicinal purposes	What diseases are they used at
	<i>Lycopodium clavatum</i> L.	The Small Caucasus, Gek-Gyol	VIII-IX	Perennial	It is met in middle and upper mountain belts – undergrowth	spore	heat rash, diathesis and different pus-free eruptions
	<i>Pinus sylvestris</i> L.	The Great Caucasus, The Small Caucasus	III-IV.	Perennial	It is met in a mountain, in upper borders of forests	leavs and buds	heat rash, some skin diseases, scab, pharyngitis, anti cough and rachitis as well as diuretic
	<i>Quercus robur</i> L.	The Great Caucasus, The Small Caucasus, Nakhchivan, Talysh	V-IX	Tree	It originates mountainous forests	bark and sometimes fruitcase/box	stomatitis, gingivite, chronic tonzillite, gastro-enteric bleeding, diarrhea, stomach keen ache, burn and skin diseases
	<i>Morus alba</i> L.	Nakhchivan AR	IV - VI	Tree / Bush	It is cultivated at the same time met along the river- banks in Tugai forests	bark of its trunk and roots, matured fruits, leavs	cardio-vascular system, anaemia, scarlatina, chickenpox, angina, stomach ulcer, rheumatism, worm driving out, cold, epilepsy and itch
	<i>Rheum rupestre</i> Litv.	Nakhchivan AR	IX-X	Perennial	It has spread in stony slopes, bush, middle mountain belt	Roots and rhizome/ rootstock of 3-4-yearred plants in summer months	in big doses a weak laxative, in little doses as appetite improver, contracting, skin diseases and bile driving out
	<i>Chelidonium majus</i> L.	The Great Caucasus, The Small Caucasus, Lankaran	V-IX	Perennial	It is met in forests, open areas, areas under crops and littery areas	Surface part of the plant	warts, wounds, ulcers, skin tuberculosis, skin cancer, liver, jaundice and bile diseases
	<i>Ribes nigrum</i> L.	Each region of Azerbaijan	V – VII	Bush	It is cultivated in the most regions of Azerbaijan as cultivar	Leaves and berries	avitaminosis, kidney diseases, cold, gastritis, cholestite, anaemia, rheumatism, infection, respiratory passage diseases, skin diseases, salt driving out, tuning of heart-vascular system

<i>Rosa canina</i> L.	The Caucasus	Great	V-IX	Bush	It is met in the areas beginning from plain to middle mountain belt – treeless bushy and grassy slopes, river-banks, glades and roadsides	Completely matured fruits	avitaminosis, scurvy, hemorrhagic diatesis, cholelitis, hepatitis, kidney and bladder, gastroenteric diseases, anti burns, wounds and infections
<i>Filipendula ulmaria</i> Maxim. (L.)	The Caucasus, Talysh, Nakhchivan	Great	VI-VIII	Perennial	It is met in wet grassy lands of middle mountain belts	rhizome/rootstock and surface part, flower	cold, diarrhea, dizenteria, different skin diseases, eczema, worm driving out and diuretic, bleeding of stomach and lungs
<i>Agrimonia eupatoria</i> L.	Each region of Azerbaijan	Great	VI-IX	Perennial	It is met in forest regions, cut forests of a middle mountain belt, open areas, bush and meadows	surface part in the period of flowerence	chronical diseases of liver, rheumatism, chronic diseases of gastroenteric diseases of mouth cavity and pharinx, foot dislocations and skin ulcers
<i>Melilotus officinalis</i> (L.) Pall.	Each region of Azerbaijan	Great	V-IX	Biennial	It is spread in grasses, bush, along roads, canals, furrows of areas beginning from plain to subalpine belt	Its herb and thin part of its trunk in the period of flowerence	respiratory diseases, expectorant, breast-softening means, gas-deducing means, ulcer, furuncle, purulent wounds' treatment and rheumatism
<i>Peganum harmala</i> L.	The Caucasus	Great	V-VIII	Perennial	It is generally met in groups and dispersedly in dry areas, grave-yards and steppe of plain areas of 1700m high of w.s.l.	Its all parts	Nervous, diseases-epidemic encefalit, parkinsonism, cold, malaria, rheumatism, itch and stomach diseases; as diuretic and sweat driving out
<i>Hypericum perforatum</i> L.	Each region of Azerbaijan	Great	V-IX	Perennial	It is mostly met in grassy slopes, river beds, weedy and bushy areas of forest regions beginning from lowlands up to subalpine belt	Its surface part	gastroenteric inflammation, cholelitis, hepatitis, cystitis, stomatitis, pharyngitis, tonsillit, angina, rheumatism, tuberculosis, inside bleeding, furuncle, mastitis, abcess, burn, worm driving out and diuretic
<i>Hippophae rhamnoides</i> L.	The Caucasus, The Small Caucasus	Great	III-X	Tree/ Bush	It is mainly met in river beds, on the banks of mountain rivers, seldom in rocky areas, sandy grounds, Tugai forests up to upper mountain belt (about 1900-2000m of w.s.l.)	Its fruit	hypo- and avitaminses, trophic ulcers, stomatitis, respiratory passages, skin tuberculosis, cancer diseases, stomach ulcer, burns, radiation
<i>Origanum vulgare</i> L.	The Caucasus, Nakhchivan AR, Talysh, Garabagh	Great	VI-VII	Perennial	It is met in forest edges, bushes, grassy areas beginning from lowlands up to subalpine belt	Its surface part in the period of flowerence	mouth cavity diseases, tooth aches, erysipelas, furuncle, skin rashes, rheumatism, cholelitis, stomach spasm, paralysis, epilepsy, for appetite and anti cough
<i>Plantago major</i> L.	Each region of Azerbaijan	Great	V-X	Perennial	It is met in meadows, forests and bushes, roads, humid and sandy areas beginning from plain up to subalpine belt	Its leaf (humid or dry), grass and juice	stomach ulcer, gastroenteric diseases, stomach and duodenal guts ulcers, anti cough, whooping cough, phlegmons and burns.
17. <i>Viburnum opulus</i> L.	The Caucasus	Great	V-IX	Bush	It is met in forests, river banks, among bushes up to middle mountain belts	bark of its trunk and fruit	rheumatism of joints, improves arterial pressure by increase of heart muscle tune, and as a laxative
<i>Bidens tripartita</i> L.	Each region of Azerbaijan	Great	VII-X	Annual	It is met in humid areas, forests, in the edges of marshy areas, in the edges of trenches of plains and low mountain belt	Its lower leaves and young tips	gastritis, ulcer, bleeding diarrhea, inside bleedings and as analgetic means
19 <i>Sanbucus nigra</i> L.	The Caucasus, The Small Caucasus, Talysh	Great	V-IX	Bush	It is met in humid, dark and stony areas of low, middle and seldom in upper mountain belts	its florescence and fruit	German measles, measles, inflammation of respiratory tracts, pharyngitis, avitaminosis, malaria, diabetes, kidney diseases, diuretic.
<i>Tussilago farfara</i> L.	The Caucasus, The Small Caucasus, Nakhchivan AR	Great	III-VI	Perennial	It is met in glades and clayey soil areas, river banks of plain up to highlands about 2200m height of w.s.l.	its florescence and leaves	kidney, bile channals different diseases, ascariдоз, blood rehabilitation and some skin diseases
<i>Helichrysum plicatum</i> DC	Nakhchivan AR, Diabar	Great	VI-VIII	Perennial	It is met in dry rocks, sandy and soily lakes beginning from middle mountain belts up to subalpine belts	its florescence	gastroenteric diseases, liver diseases, diarrhea, sweat riding out, headaches, joint aches, jaundice, itch, worm riding out
<i>Tanacetum vulgare</i> L.	The Caucasus, Nakhchivan AR	Small	VI-IX	Perennial	It is met in meadows, stony slopes beginning from middle mountain belt up to subalpine belt	its florescence and leaves	dyzenthery, stomach catharrah, anaemia, jaundice, as bile riding out ödqovucu kimi, liver, kidney diseases, diabetes, rheumatism, malaria and cold
<i>Matricaria chamomilla</i> L.	Kur-Araz plain	Small	VI-VIII	Annual	It is met in meadows, savannahs and glades	anthodium and flowers	chronical colitis, eczema, cleaning of pygment spots, burns, chronic liver diseases, jaundice, bladder, kidney, skin diseases, profilactics of malaria, anaemia, rheumatism and insomnia
<i>Taraxacum officinale</i> Wigg.	The Caucasus, The Small Caucasus	Great	V-VIII	Perennial	It is met in meadows, bushes, sowing areas, roadsides of middle and subalpine belts	root and surface part	gastroenteric and kidney diseases, worm riding out, angina, dentals inflammations, heat, diabetes, anti cough, anti thirst, rheumatism and in strengthenin of organizm

<i>Verbascum densiflorum</i> Bertol.	The Caucasus, Talysh, Nakhchivan AR	Great The Caucasus, AR,	VI - X	Biennial	It is met in plain areas up to middle mountainous belt – forest edges, dump, river banks.	petals	gall bladder, liver diseases, gastritis, dispepsia, ulcers, pleuritis, lungs and spleen diseases, worm riding out an iuredic
<i>Centaurium umbellatum</i> Gilib.	The Caucasus, Nakhchivan Talysh	Great AR,	VI - X	Annual	It is spread in middle mountainous belt – forest edges, bushy and grassy areas.	surface part	rheumatism, diabetes, lungs diseases, whooping cough, kidney aches, bladder inflammation, epilepsy, deuretic and regulates function of liver

REFERENS

Damirov I.A. Towards the history of use of herbs in Azerbaijan. Baku, (1970) 37.

Damirov I.A., Prilipco L.I., Shukurov D.Z., Kerimov U.B. Herbs of Azerbaijan. Baku: (1988) 319.

Zayko L.N., Pimenova M.E., Maslikov V.U. Review of the method and results on study of herbs of Russia (ВИЛИАР). Transactions of the Int. Scientific and Practical Conference. Present-day problems of phytodesign. Belgorod, 2007; 148-157.

Kerimov U.B., Islamova N.A., Khalilov D.S., Jafarova R.E., Suleymanov T.A., Isayev D.I., Agayev E.M.. Prospect of use of herbal raw material and production of phytopreparations in Azerbaijan. Baku: 1996; 84 p-s.

Krylova I.Y., Shreter A.I. Methodical directions on resource study of the wild herbs. M: ВИЛИАР, 1971; 21p-s.

Ibadullayeva S.J., Mamedova S.E., Sultanova Z.R., Movsumova N.V., Jafarli I. Medicinal plants of Azerbaijan flora used in the treatment of certain diseases. African Journal of Pharmacy and Pharmacology Vol. 4(5). August –pp. 545-548. ISSN 1996-0816 © 2010 Academic Journals.

Ibadullayeva S.J. Flora and vegetation of Azerbaijan: ecoprotective effect of the useful plants. “*Actual problems in the use of*

useful plants” International Conference. October 26-28, Baku, 2011; pp.8-13.

Ibadullayeva S.J. Medicinal plants of Azerbaijan. / International Conference. Diversity, characterization and utilization of Plant Genetic Resources for enhanced resilience to climate. Baku, 2011; p.69-70.

Mammedova Z.A., Ibadullayeva S.J. Antimicrobial characteristics of essential oils of some species of the *Nepeta* L. genus / Journal of Medicinal Plants Research Vol. 5(17), ISSN 1996-0875, 2011; 4369-4372

Prilipko L.I. Herbal resources of natural & economical areas of the Azerbaijan SSR. Baku. (1965) 134.

Rossiyskiy D.M. Domestic herbs and their medical appendix. M: Medgiz, (1944) 90.

Serebryakov I.G. Lifestyle of high plants and their study. Field Geobotany. M: Nauka. T.Z., (1964) 146-202p-s.

Present-day phytoterapy / under the edition of V.Petkov Sofia, (1988) 976p-s.

Sokolov S.Y. Phytoterapy and phytopharmacology. M:Medical Inform. Agency, (2000) 971.

Turova A.D., Sapojnikova E.N. Herbs of the USSR and their use. M:Medicine, (1984) 230.

The Azerbaijan flora.. Volumes I-III. Baku: (1950-1961)