Introduction the medicinal species of *Asteraceae* family in Ilkhji and Sharafaldin regions of Esat Azarbaijan in Iran

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Abstract: As medicinal plants are suitable alternatives for synthetic and chemical drugs (Idu and Osemwegie) also because of medical and nutritional importance and valuable protein contents of Asteraceae species, all plants of Asteraceae family are collected in Ilkhij and sharafaldin regions during growth seasons of 2007-2009. Plants were collected in 2 regions according to the classical method of regional floristical studies. Collected plants were recognized by valid references (Parsa and Reshinger). Then medical species are chosen by using pharmacopeias. The results of the current study demonstrated that at Ilkhiji region 31 species belong to 24 genuses and at Sharafaldin region 25 species belong to 20 genuses that all of them belong to Asteraceae family. Among these species, 19 species at Ilkhii and sharafaldin region had medicinal properties. Medicinal species of these 2 regions consist of: Achillea tenuifolia, Achillea vermicularis, Achillea millefolium, Arctium lappa, Acroptilon repens, Cardus pycnocephalus, Carthamus oxyacantha, Centaurea aggregate, Cichorium intybus, Cirsium ravens, Cnicus benedictus, Cousinia calcitrapa "Lactuca scarioloides, Lactuca serriola, Onopordon leptolepis, Senecio mollis, Sonchus oleraceus, Tragopogon marginatus, Xanthium spinosum. The results of this study showed that the region has a great potential for producing respective medicinal plants species belong to those families. Medicinal plants recently become more important because of their medicinal uses and in addition they are valuable source of protein. [Leila Joudi, Ghassem Habibi Bibalani and Hamide shadkami. Introduction the medicinal species of Asteraceae family in Ilkhji and Sharafaldin regions of Esat Azarbaijan in Iran. Journal of American Science 2011;7(5):455-4581. (ISSN: 1545-1003). http://www.americanscience.org.

Key words: Family - Pharmacopeia - Medicinal plant

1. Introduction

Today according to the World Health Organization (WHO), as many as 80% of the world's people depend on traditional medicine for their primary health care needs. There are considerable economic benefits in the development of indigenous medicines and in the use of medicinal plants for the treatment of various diseases (Azaizeh, Fulder and Khalil, 2003). Plants have been used in traditional medicine for several thousand years (Abu-Rabia, 2007). The traditional culture worldwide are more or less endangered as a result of increasing legislative and moral supports accorded orthodox practice over native medicine(Ido,2007) Legumes are considered to be a very good source of polyphenolic compounds that may act as chemo preventive agents, especially by their antioxidant properties. With attention to exploration of important medicinal species of Fabaceae family in two regions (Joudi, 2010). Aim of this study was to introduce of medicinal species of Asteraceae family in Ilkhji and Sharafaldin regions, Eastern Azerbaijan province-Iran.

2. Material and Methods

All the plant samples in this research, belong to Fabaceae family, were gathered from Ilkhji and Sharafeddin areas which is located in East Azerbaijan province. Ilkhji area is located in 25 km south west of

Tabriz and the geographic coordinates 45.59 to 12 and 46.3 eastern longitudes and 37.55 to 37.57 north latitude and Shabestar city is located in the north-west of Tabriz and the geographic coordinates 37 degrees and 42 minutes of north latitude and 45 degrees and 5 minutes and 46 degree and 9 minutes East longitude. Plant samples belong to Fabaceae family from Yal, Khaselar, Kordlar and Chaman areas and from Sharafaddin area of Shabestar city as well, were obtained during winter of year 2007 to fall year 2009. All the plant samples were pressed according to standard guides. If the plant samples were too long, then they were cut from several areas, so the sample contained the complete plant. At the next stage, samples were stick to the herbarium Cardboards and then were identified using floras, keys, illustrations and explanations which are available for different sources of plant Species. Finally, the medicinal species belong to this family were introduced using valid standard pharmacological sources.

Result

Result of survey show that 21 species belong to 10 genera (Table 1) and 6species with 6 genera are in common practice in the traditional system of health care of 2 regions. From this study 10 species were introduces as a medicinal plants. Results showed in table 1, table 2 and table 3.

Family	Genus	species	Growth Form
Asteraceae	Achillea	A.millefolium	Hemicriptophite
	Achillea	A. vermicularis	Hemicriptophite
	Acroptilon	A. repens	Hemicriptophite
	Anthemis	A. hyalina	Therophite
	Calendula	C. persica	Therophite
	Carthamus	C. oxyacantha	Therophite
	Centaurea	C. depressa	Hemicriptophite
	Centaurea	C. pulchella	Hemicriptophite
	Centaurea	C. virgata	Hemicriptophite
	Cichorium	C. intybus	Hemicriptophite
	Cirsium	C. arvense	Hemicriptophite
	Cirsium	C. congestum	Hemicriptophite
	Cnicus	C. benedictus	Therophite
	Cosinia	C. rhaphiostega	Camephite
	Crepis	C. foetida	Hemicriptophite
	Crupina	C. Crupinastrum	Therophite
	Echinops	E. cephalotes	Therophite
	Helichrysum	H. araxinum	Hemicriptophite
	Helichrysum	H. rubicundum	Hemicriptophite
	Heteropappus	H. altaicus	Hemicriptophite
	Kolepinia	K. teniuisima	Therophite
	Lactuca	L.scarioloides	Hemicriptophite
	Lasiogon	L.muscoides	Therophite
	Onopordon	O.leptolepis	Hemicriptophite
	Senecio	S.vernalis	Therophite
	Sonchus	S.oleraceus	Hemicriptophite
	Taraxacum	T.vulgare	Therophite
	Tragopogon	T.buphthalmoides	Therophite
	Tragopogon	T.caricifolium	Therophite
	Tragopogon	T.graminifolius	Hemicriptophite
	Xanthium	X.spinosum	Therophite

Table (2) plant species in Asteraceae in Sharafaldin

Family	Genus	species	Growth Form
Asteraceae	Achillea	A.micrantha willd	Hemicriptophite
	Achillea	A.tenuifolia Lam	Hemicriptophite
	Achillea	A.vermicullaris	Hemicriptophite
	Acroptilon	A.repens(L)DC.subsp.repens	Hemicriptophite
	Arctium	A.lappa.L	Hemicriptophite
	Cardus	C.pycnocephalus L.	Therophite
	Carpesium	C.abrotanoides L	Hemicriptophite
	Carthamus	C.oxyacantha M.B	Therophite
	Centaurea	C. aggregate	Hemicriptophite
	Centaurea	C.balsamita.subsp.balsamita	Therophite
	Centaurea	C.cheiranthifolia	Hemicriptophite
	Centaurea	C.iberica.Trev.et Spreng	Hemicriptophite
	Centaurea	C.triumfetti All.	Hemicriptophite
	Centaurea	C.virgata	Hemicriptophite
	Cnicus	C.benedictus	Therophite
	Cichorium	C.intybus L.	Hemicriptophite
	Cirsium	C.osseticum(Adams)	Hemicriptophite
	Cousinia	C.calcitrapa	Hemicriptophite

Cousinia	C.calcitrapa	Hemicriptophite
Cousinia	C.turcomanica C.wink L.	Hemicriptophite
Crepis	C.sancta(L.)	Therophite
Lactuca	L.serriola L.	Therophite
Matricaria	M.recutita.L	Therophite
Onopordon	O.leptolepis DC	Hemicriptophite
Pulicaria	P.dysentarica	Hemicriptophite
Senecio	S.mollis willd	Hemicriptophite
Senecio	S.vulgaris	Therophite
Sonchus	S.tenerrimus	Hemicriptophite
Taraxacum	T.syriacum Boiss	Hemicriptophite
Tragopogon	T.marginatus	Geophite
Tragopogon	T. pratensis	Geophite
Xantium	X.spinosum	Hemicriptophite

Table (3) Medical species in Asteraceae in Ilkhji & Sharafaldin

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Region	Genus	species	Medical property
Ilkhji	Achillea	A. millefolium	Blood stopping-digesting anti spasm
Ilkhji & Sharafaldin	Achillea	A.vermicularis	Antimicrobial- antioxidant
Sharafaldin	Achillea	A.tenuifolia	antioxidant
Ilkhji & Sharafaldin	Acroptilon	A.repens	Antimicrobial
Sharafaldin	Arctium	A.lappa.L	blood refining- ntimicrobial-
			Antidiurtic
Sharafaldin	Cardus	C.pycnocephalus	Antimicrobial
Ilkhji & Sharafaldin	Carthamus	C.oxyacantha	Antimicrobial- anti worm
Sharafaldin	Centaurea	C. aggregate	Antimicrobial
Ilkhji	Cichorium	C.intybus	Colleagues – blood refining- anti fever
Ilkhji	Cirsium	C.arvens	Notorious – appetizing – to cure skin
			diseases
Ilkhji & Sharafaldin	Cnicus	C.benedictus	Nutritious -sweaty - blood refining-
			anti fever
Sharafaldin	Cousinia	C.calcitrapa	Antimicrobial
Ilkhji	Lactuca	L.scarioloides	Anti convulsion - light sleeping pills -
			L. Anti tumour
Sharafaldin	Lactuca	L.serriola L.	Antimicrobial
Ilkhji & Sharafaldin	Onopordon	O.leptolepis	Anti tumour
Sharafaldin	Senecio	S.mollis willd	Blood stopping
Ilkhji	Sonchus	S.oleraceus	Effective in asthma and breathing
			diseases
Sharafaldin	Tragopogon	T.marginatus	appetizing
Ilkhji & Sharafaldin	Xanthium	spinosum L.	Anti inflammation – anti fever

Discussion

This report is based on the survey of medicinal plants from different communities in east Azerbaijan State, Iran. The present study documents data regarding the availability of ethno medicinal plant resources, which have various potential uses. All the plants mentioned in this paper are very popular among the communities of east Azerbaijan and enjoys a good reputation in Trado- medicinal practice in the areas. From this study, it was found that plants are used to treat mostly as Laxative, Anti bacterial, Antioxidant, Sedative, Diuretique, Cholagoge and Cardio tunica. We suggest a detail assessment of resource quantities productivity potential, sustainable harvesting methods, domestication possibilities, market value of potentially promising species and importantly, equitable benefit sharing regiments, this view is also shared by Shrestha and Dhillion (Shrestha and Dillon, 2003). Bhat recently reviewed diverse sources of such information in traditional abstracting services as well as in a variety of online electronic databases (Bhat 1997). One hundred and sixty-one species out of 1132 are new records for the square B6 and 95 are new for C6. These new records have been published previously (Ekim, Yildiz and Elik, 1986). Properly studied and recorded, this traditional knowledge could revolutionize the world of medicine.

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References:

1. Abu-Rabia A. Urinary diseases and ethnobotany among pastoral nomads in the Middle East. Journal of Ethnobiology and Ethnomedicine. 2005. **1:4:**

2. Azaizeh H, Fulder S, Khalil K, Said O: Ethnomedicinal knowledge of local Arab practitioners in the Middle East Region. Fitoterapia 2003, **74:**98-108.

30/4/2011

3. Bhat KKS. Medicinal and plant information Databases.In: Medicinal Plants for Forests Conservation and health Care.Brodeker, G. AND p.Vantomne (Eds.),FAO,Non – Wood Forests products Series. 1997.No.11, FAO,Rome,pp:158.

4. Dulger B. Gonuz A. Antimicrobial activity of certain plants used in turkish traditional medicine. Asian Journal of Sciences. 2004.3(1):104-107

5. Ekim T, Yildiz B and Elik N. New Floristic Records from Central Anatolia. DoÛa Turk J Bio 1986.10(1): 79-99.

6. Idu M and Osemwegie OO. Some Medicinal Flora of Forest Reserve in Southern Nigeria. Research Journal of Medicinal Plant. 2007.1(1): 29-31.

7. Joudi L and Habibi Bibalani G. Introduction of medicinal species of Legominosae family in Ilkhji region and Sharafaldin regions of Esat Azarbaijan *in* Iran. Rearch. 2010Vol. 2. No. 5. September.

8. Parsa A. Flore de L, Iran. 1943-1950. Vol. 1-5.

9. Reshinger KH. Flora Iranica .1963-1990.

10. Shrestha PM and Dhillion SS. Medicinal plants diversity and use in the highlands of Dolakkha district, Nepal.J.Ethnopharmacol. 2003.86:81-96.