



ORIGINAL ARTICLE

Survey of Indigenous medicinal plants and Traditional foods in the Lorestan province, West Iran

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ABSTRACT

The aims of this study were to identify, present and review the medicinal plants and traditional foods which used by lori herbalists. The list of traditional healers of Lorestan province was prepared and data were obtained by direct observation, interviews and the questionnaires after that, herbarium samples were collected from the desired area. According to results, there are 49 indigenous species of medicinal and food plants collected during the survey that locale people were believing they are healing. 41 of them are for medicinal purposes and the rest are for food. The most numbers of medicinal plants were belong to the families of Umbelliferae and Liliaceae (both 4 species). Vomit and Fever were the kind of disease mentioned with the most number of species, and processed edible plants were the kind of consumption pattern represented by the most number of species. In conclusion, people in this area have a strong belief that plants have a positive impact in the treatment of disorders and they have used medicinal plants since ancient times to treat these disorders. Our study revealed the importance of herbal medicines and traditional medicine in this area as medicinal resource for drug discovery in future.

Keywords: Medicinal plants; traditional foods; lorestan.

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INTRODUCTION

Traditional medicine has a long history of serving peoples all over the world. In many countries and cultures of different nations, the use of medicinal plants to treat diseases and maintain public health is highly prevalent [1, 2]. Natural products play an important role in the field of new drugs research and recent studies have also revealed promising results from using of plants in the treatment or prevention of a wide variety of hard curable diseases such, atherosclerosis [3, 4], diabetes [5, 6], cardiovascular diseases [7, 8], neurological disorders (9, 10) and cancer [11, 12]. Therefore, to the aims of this study were to gather local knowledge and traditional medicine of ethno-botany of Lorestan region to identify herbs and foods that are effective in the treatment.

MATERIALS AND METHODS

In this study the data were collected by interview and questionnaire during the period of June and July 2014 using public resources. List of traditional healers was prepared and then necessary information of traditional healers was collected by direct observation, interview and questionnaire methods. Questionnaires were distributed between lori traditional healers and at the same time interview was performed. Herbal samples were collected from the desired region and after drying, their herbarium specimens were prepared. The herbarium samples obtained from data of local traditional physicians in the questionnaire were collected from the region and then they were authenticated by a botanist using a variety of flora and valid references.

RESULTS AND DISCUSSION

After analyzing the data obtained from questionnaires and interviews in lorestan, it has been demonstrated that there are 49 indigenous species of medicinal (Table 1) and food (Table 2) plants collected during the survey were used for the disease/disorders in traditional lorish medicine. 41 of them are for medicinal purposes and the rest are for food. The most numbers of medicinal plants were belong

to the families of Umbelliferae and Liliaceae (both 4 species). Vomit and Fever were the kind of disease mentioned with the most number of species (Figure 1), and processed edible plants were the kind of consumption pattern represented by the most number of species. These results showed that the most part of plant that used is Leaves (23 %). **Table 1** showed the most characteristics of our plants with their therapeutic properties.

Table 1. The most characteristics of medicinal plants with their therapeutic properties.

Scientific name	Family name	Local name	Habit	Parts used	Uses recorded
<i>Ficus carica</i> L.	Moraceae	<i>Hanjir</i>	Herb	Fruits	Respiratory systems disorder , Digestive system disorders
<i>Foeniculum vulgare</i> miller	Umbelliferae	<i>Raziane</i>	Herb	Seed	Genitourinary system disorders
<i>Fumaria vaillantii</i> Loisel.	Fumariaceae	<i>Shatara</i>	Herb	Leaves	Digestive system disorders
<i>Gladiolus atrovioleaceus</i> Boiss.	Iridaceae	<i>Asbak</i>	Herb	Flower	diarrhoea and dysentery , Fever, vomit
<i>Glucium grandiflorum</i> Boiss. & Huet.	Papaveraceae	<i>Halpachan</i>	Tree	Leaves	Digestive system disorders, Respiratory systems disorder , Fever, against coughing
<i>Gundelia tournefortii</i> L.	Compositae	<i>Kangar</i>	Herb	Seed	Genitourinary system disorders
<i>Heliotropium</i> spp.	Boraginaceae	<i>Biro</i>	Herb	Whole plant	weakness and Digestive system disorders
<i>Heracleum persicum</i> Desf. exfischev.	Umbelliferae	<i>Soolan</i>	Herb	Whole plant	Digestive system disorders, weakness, Fever
<i>Juglans regia</i> L.	Juglandaceae	<i>gaviz</i>	Herb	Fruits	vomit , Digestive system disorders
<i>Prunella vulgaris</i> L.	Labiatae	<i>Giazofe</i>	Herb	Roots	Digestive system disorders, vomit , Fever
<i>Lactuca seriola</i> L.	Compositae	<i>Talishak</i>	Herb	leaves	Respiratory systems disorder
<i>Lepidium latifolium</i> L.	Cruciferae	<i>Ghaji</i>	Herb	Flower	weakness , inflammation
<i>Linum usitatissimum</i> L.	Linaceae	<i>Bazrak</i>	Herb	Whole plant	Digestive system disorders, Fever, weakness
<i>Loranthus grewinkii</i> Boiss. & Buhse	Lorantaceae	<i>Mokhoraka</i>	Herb	Whole plant	Fever
<i>Morus alba</i> L.	Moraceae	<i>Toot</i>	Tree	Fruits	Circulatory system disorders
<i>Narcissus tazetta</i> L.	Amaryllidaceae	<i>Narges</i>	Herb	Roots	Circulatory system disorders
<i>Nigella oxypetal</i> Boiss	Ranunculaceae	<i>Siavala</i>	Herb	Seed	vomit , Nutritional disorders and weakness
<i>Onopordon carduchrum</i> bornm. & beaur. DC.	Compositae	<i>Karkol</i>	Herb	Seed	vomit , Fever, against coughing
<i>Ornithogalum umbellatum</i>	Liliaceae	<i>gilakhe</i>	Herb	Leaves	Nutritional disorders , weakness, Fever
<i>Populus alba</i> L.	Salicaceae	<i>Chenar</i>	Tree	Leaves	Weakness, vomit
<i>Ranunculus sericeus</i> Banks & soland	Ranunculaceae	<i>Chenar kala</i>	Tree	Leaves	Vomit, diarrhoea and dysentery
<i>Rosa foetida</i> Herrm	Rosaceae	<i>Daligh</i>	Herb	Flower	Genitourinary system disorders
<i>Sisymbrium</i> spp.	Cruciferae	<i>Khakeshi</i>	Herb	Seed	Digestive system disorders, vomit
<i>T. dasyurum</i> C. presl	Papilionaceae	<i>Kaleke</i>	Herb	Whole plant	Fever, inflammation, vomit, diarrhoea and dysentery
<i>Pistacia atlantica</i>	Anacardiaceae	<i>Kolang</i>	Tree	Sap	Respiratory systems disorder, inflammation
<i>Pistacia khinjuk</i>	Anacardiaceae	<i>Khanjok</i>	Tree	Fruits	Respiratory systems disorder, vomit, against coughing
<i>Rhus coriaria</i>	Anacardiaceae	<i>Somagh</i>	Herb	Leaves and Fruits	Inflammation, Nutritional disorders, weakness

<i>Artemisia annua</i>	Asteraceae	<i>Khersdari</i>	Herb	Whole plant	Circulatory system disorders, weakness
<i>Matricaria aurea</i>	Asteraceae	<i>Flowers bayne</i>	Herb	Flower	Fever, vomit, diarrhoea and dysentery
<i>Descorania Sophia</i>	Brassicaceae	<i>Khak shir</i>	Herb	Seed	Nutritional disorders, diarrhoea and dysentery
<i>Nasturtium Officinale</i>	Brassicaceae	<i>Balmak</i>	Herb	Whole plant	Circulatory system disorders, weakness
<i>Viscum album</i>	Lorantaceae	<i>Chakam</i>	Herb	Fruits and flower	Fever, vomit, diarrhoea and dysentery
<i>Quercus branti</i>	Fagaceae	<i>Ballot</i>	Tree	Fruits	Respiratory systems disorder
<i>Quercus infectoria</i>	Fagaceae	<i>Darmazi</i>	Herb	Leaves	weakness , Digestive system disorders
<i>Juglans regia</i>	Juglandaceae	<i>Gerdo</i>	Tree	Leaves	Fever, weakness
<i>Stachys lavandulifolia</i>	Lamiaceae	<i>Kalkane</i>	Herb	Whole plant	Circulatory system disorders
<i>Allium hirtifolium</i>	Liliaceae	<i>Moosir</i>	Herb	Seede	Digestive system disorders, Fever, vomit
<i>Fritillaria imperialis</i>	Liliaceae	<i>Ashk maryam</i>	herb	Fruits	Inflammation, weakness, diarrhoea and dysentery
<i>Eremurus Persicus</i>	Liliaceae	<i>Zereshk</i>	Herb	Leaves	Genitourinary system disorders, Nutritional disorders
<i>Malva neglecta</i>	Malvaceae	<i>Toole</i>	Herb	Leaves	Nutritional disorders, vomit
<i>Ficus Carica</i>	Moraceae	<i>Anjir</i>	Tree	Fruits	Circulatory system disorders, inflammation, poisonings, against pain, Reducing cholesterol in the body, detoxification, vomit
<i>Faba vulgaris</i>	Papilionaceae	<i>Baghela</i>	Tree	Seed	Respiratory systems disorder
<i>Plantago Psyllium</i>	Plantaginaceae	<i>Barhang</i>	Herb	Leaves and seed	Digestive system disorders, Nutritional disorders, vomit, diarrhoea and dysentery
<i>Rosa canina</i>	Rosaceae	<i>Nastaran</i>	Tree	Whole plant	Inflammation, weakness, Fever
<i>Paliurus spinosa</i>	Rhamnaceae	<i>Ahan dare</i>	Herb	Roots and Fruits	Circulatory system disorders, vomit
<i>Ulmus minor</i>	Ulmaceae	<i>Sizab abi</i>	Herb	stem	inflammation , Digestive system disorders, Fever, vomit, diarrhoea and dysentery
<i>Smyrniun cordifolium</i>	Umbelliferae	<i>Piname</i>	Herb	Whole plant	Fever, inflammation, Circulatory system disorders

Table 2. Plants for food

Scientific name	Family name	Local food	Habit	Parts used	Uses recorded	Dosage and Mode of Administration
<i>Foeniculum vulgare</i> miller	Umbelliferae	<i>Raziane - joujoush</i>	Herb	Seed	Genitourinary system disorders	Seeds are boiled and cooked foods.
<i>Gundelia tournefortii</i> L.	Compositae	<i>Kangar- ashe kenger</i>	Herb	Seed	Genitourinary system disorders	Seeds are boiled and cooked foods.
<i>Lactuca seriola</i> L.	Compositae	<i>Talishak - nane gerda</i>	Herb	leaves	Respiratory systems disorder	Leaves are cleaned, crushed then subjected to hot iron along with the addition of salt and then consumed.
<i>Narcissus tazetta</i> L.	Amaryllidaceae	<i>Narges - ashe torsh</i>	Herb	Roots	Circulatory system disorders	Roots are crushed and boiled with warm water then consumed twice a day.
<i>Pistacia atlantica</i>	Anacardiaceae	<i>Kolang - gholenga</i>	Tree	Sap	Respiratory systems disorder, inflammation	Sapis burned and breathe the smoke

<i>Rhus coriaria</i>	Anacardiaceae	<i>Somagh - soghdou</i>	Herb	Leaves and Fruits	Inflammation, Nutritional disorders, weakness	Leaves and Fruits are boiled and mixed with meat
<i>Allium hirtifolium</i>	Liliaceae	<i>Moosir - nane moosir</i>	Herb	Seede	Digestive system disorders, Fever, vomit	Seede is boiled and then consumed, twice per day.
<i>Eremurus Persicus</i>	Liliaceae	<i>Zereshk - ashe zereshk</i>	Herb	Leaves	Genitourinary system disorders, Nutritional disorders	Leaves are boiled and consumed Fourtimes a day
<i>Ficus Carica</i>	Moraceae	<i>Anjir - sim tal</i>	Tree	Fruits	Circulatory system disorders, inflammation, poisonings, against pain, Reducing cholesterol in the body, detoxification, vomit	Fruits are Roasted and consumed

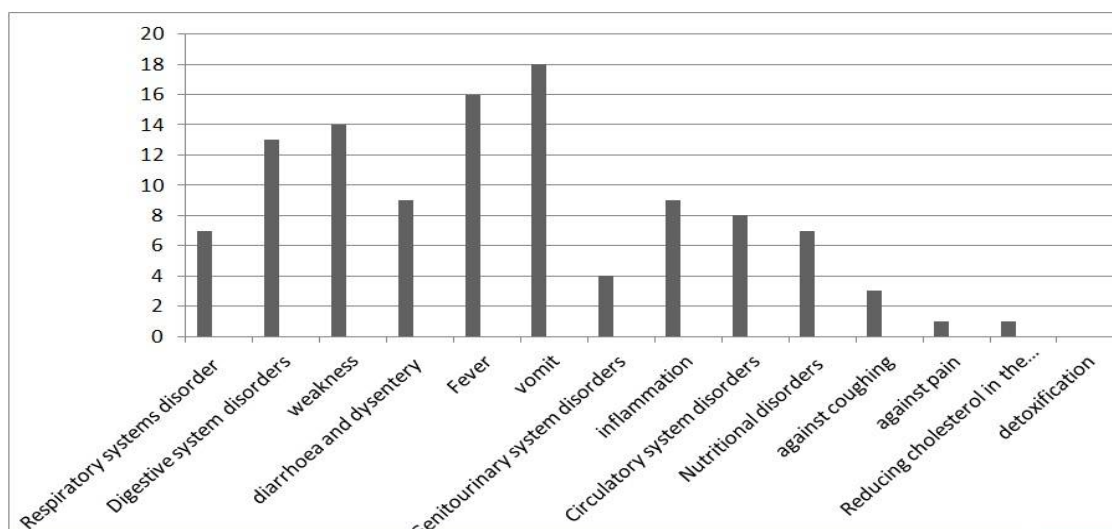


Figure 1. The most sign of diseases that treated by folk medicinal plant.

Traditional knowledge transfer is not only preservation of the knowledge but the preservation of diverse knowledge and practise and the management of local resources.

Today many medicinal plants face extinction or severe genetic loss, but detailed information is lacking...too much emphasis has been put on the potential for discovering new wonder drugs, and too little on the many problems involved in the use of traditional medicines by local populations. In this study, the ethno botanic data about medicinal plants which used in folk medicine from different regions of the West provinces, Iran were prepared and compared. There are several reports about the plants which can poses different therapeutic properties and used for several decades in folk medicine. *Acacia senegal* Wild., *Azadirachta indica* A. Juss., *Tinospora cordifolia* Willd., *Phyllanthus emblica* Linn. are used in diabetes. *Boerhaavia diffusa* Linn. is used in liver disorders; *Euphorbia hirta* Linn. is often used against asthmatic problems; *Phyllanthus emblica* Linn. is given with buttermilk to cure jaundice. *Ageratum conyzoides* Linn. *Anacyclus pyrethrum* DC, *Aristolochia indica* Linn., *Calotropis procera* (Ait.) R.Br., *Capsicum annuum* Linn., *Elettaria cardamomum* Maton, *Syzygium aromaticum* (Linn.) Merrill & Perry, *Piper nigrum* Linn., *Amomum subulatum* Linn., *Flemingia chappar* Buch., *Podophyllum emodi* Wall. are used as antileukaemic plant crude drugs by Ayurvedic *Vaidyas*. *Ficus glomerata* Roxb., *Fagonia cretica* Linn., *Curcuma amada* Roxb., *Cyperus rotundus* Linn., are used by the women folk for menstruation related problems and to regulate the menstruation cycle. *Bombax ceiba* Linn., *Calotropis procera* (Ait.) R.Br. and *Curcuma longa* Linn. are used for the treatment of face shadow, darkness and pimples. [13, 14]. In other regions of Iran, which have traditional religion, the use of medicinal plants is very common even higher than chemical drugs. In Sistan and Baluchistan province, South-East of Iran, *Cardaria draba* (L.) Desv, Azmak, was used to soften the breast and relieve anemia [15, 16].

Traditional use of plants in other province of Iran is also common and this include Kerman, Isfahan and Ilam [1]. Therapeutic effect of medicinal plants in North, South, East, West and central parts of Iran showed that this country is a vast place to use herbs for treating diseases, however, the use of some plants in different regions of Iran with similar therapeutic effects were observed.

In conclusion, traditional medicinal plants can be a source of biological and pharmacological products for the future.

REFERENCES

1. Ghasemi Pirbalouti, A., Momeni, M. & Bahmani, M. 2013. Ethnobotanical study of medicinal plants used by kurd tribe in dehloran and abdanan districts, Ilam province, Iran. *Afr J. Tradit Complement Altern Med*, 10(2): 368.
2. Bahmani, M. & Eftekhari, Z. 2012. An ethnoveterinary study of medicinal plants in treatment of diseases and syndromes of herd dog in southern regions of Ilam province, Iran. *Comp Clin Path*, 22: 403-407.
3. Madihi, Y., Merrikhi, A., Baradaran, A., Rafieian-kopaei, M., Shahinfard, N., Ansari, R., Shirzad, H. & Mesripour, A. 2013. Impact of sumac on postprandial high-fat oxidative stress. *Pak J Med Sci.*, 29 (1): 340-345.
4. Setorki, M., Rafieian-Kopaei, M., Merrikhi, A., Heidarian, E., Shahinfard, N., Ansari, R., Nasri, H., Esmael, N. & Baradaran, A. 2013. Suppressive impact of *Anethum graveolens* consumption on biochemical risk factors of atherosclerosis in hypercholesterolemic rabbits. *Int J Prev Med.*, 4(8): 889-895.
5. Akbari, F., Ansari-Samani, R., Karimi, A., Mortazaei, S., Shahinfard, N. & Rafieian-Kopaei, M. 2013. Effect of turnip on glucose and lipid profiles of alloxan-induced diabetic rats. *Iran J Endocrinol Metabol*, 14(5): 1-7.
6. Rafieian-Kopaei, M., Ghobadi, Sh. & Nasri, H. 2013. The protective effect of garlic extract on diabetic nephropathy. *J Isfahan Med Sci.*, 31(247): 1267-1269.
7. Khosravi-Boroujeni, H., Mohammadifard, N., Sarrafzadegan, N., Sajjadi, F., Maghroun, M., Khosravi, A., Alikhasi, H., Rafieian, M. & Azadbakht, L. 2012. Potato consumption and cardiovascular disease risk factors among Iranian population. *Int J Food Sci Nutr.*, 63(8):913-920.
8. Khosravi-Boroujeni, H., Sarrafzadegan, N., Mohammadifard, N., Sajjadi, F., Maghroun, M., Asgari, S., Rafieian-Kopaei, M. & Azadbakht, L. 2013. White rice consumption and CVD risk factors among Iranian population. *J Health Popul Nutr.*, 31(2): 252-261.
9. Akhlaghi, M., Shabanian, Gh., Rafieian-Kopaei, M., Parvin, N., Saadat, M. & Akhlaghi, M. 2011. Citrus aurantium blossom and preoperative anxiety. *Revista Brasileira de Anestesiologia*, 61(6):702-712.
10. Roohafza, H., Sarrafzadegan, N., Sadeghi, M., Rafieian-Kopaei, M., Sajjadi, F. & Khosravi-Boroujeni, H. 2013. The association between stress levels and food consumption among Iranian population. *Arch Iran Med.*, 16(3):145-148.
11. Azadmehr, A., Hajiaghaee, R., Afshari, A., Amirghofran, Z., Rafieian-Kopaei, M., Yousofi-Darani, H. & Shirzad, H. 2011. Evaluation of in vivo immune response activity and in vitro anti-cancer effect by *Scrophularia megalantha*. *J Med Plants Res.*, 5(11): 2365-2368.
12. Shirzad, H., Shahrani, M. & Rafieian-Kopaei, M. 2009. Comparison of morphine and tramadol effects on phagocytic activity of mice peritoneal phagocytes in vivo. *Int Immunopharmacol*, 9(7-8):968-970
13. Katewa, S. S. & Arora, A. 1997. Some plants in the folk medicine of Udaipur District (Rajasthan). *Ethnobotany*, 9: 48-51.
14. Sharma, L. K., Agarwal, G. & Kumar, A. 2003. Medicinal plants for skin & hair care, *Indian J Traditional Knowledge*, 2(1): 62-68.
15. Zolfaghari, A., Adeli, A., Mozafarian, V., Babaei, S. & Habibi-Bibalan, Gh. 2013. Identification of medicinal plants and indigenous knowledge of local people Arabian. *J Med Arum Plants*, 28(3): 534-550.
16. Olfati, A., Moghaddam, G., Moradi, N., Bakhtiari, M. 2014. The Relationship between Progesterone and Biochemical Constituents of Amniotic Fluid with Placenta Traits in Iranian Crossbred Ewes (Arkharmarino×Ghezel). *Asian Pac J Trop Med* 7 (Suppl 1):162-166.

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