

## SOME IMPORTANT MEDICINAL PLANTS IN IRAQ

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Accepted August 05, 2014

**In some countries, traditional medicine remains an integral part of the formal health system and exists on an equal footing with modern medicine. Traditional medicine has an important role in health care in Iraq especially in country side and in desert areas and practiced by what is called Attar (Herbalist). In order to evaluate the knowledge and the practice of herbal medicine by the herbalist and to list the most common herbs and the less commonly used medicinal plants by those herbalist; about 75 herbalists were interviewed throughout the country and data concerning herbs present in their shops, the herbalist recommendations on the use of these herbs, the part used and other observations were recorded. The present paper reports the most common herbs as well as the less commonly used medicinal plants in tabular (tables) form, and problems observed dealing with practices of herbal remedy by those herbalists in Iraq and recommendations for improvement.**

**Key words:** Common herbs, herbalists, Iraq, less common herbs, traditional medicinal plants.

### INTRODUCTION

Iraq, like any other country of Middle East and elsewhere in the world, is differentiated into two societies: rural and urban; both of these societies depend largely on the rich traditional heritage of the use of medicinal plants for the treatment of different illnesses, hence folk medicine is widely practiced by the people of the cities and the inhabitants of the remote areas or the nomads who generally inhabit the desert areas of the steppe and the uplands.

Iraq is well known for the great variation in wild plants due to the geographical diversity and climatic circumstances. It is located at the meeting point of three continents: Asia, Africa, and Europe, within these continents there are many different floras. Iraq is bordered in the north, which is mountainous area by Turkey and Iran in the east which has similar geography, while in the south it is bordered by Saudi Arabia which is mostly a desert area and lastly, from west it is bordered by Syria, where the land is called Albadia and is characterized by low

rainfalls. Iraq has no less than 363 medicinal plant species belonging to about 270 genera from approximately 98 families (Mohmod et al; 1988, Ghazanfar 1994; Chakravarty, 1976).

Traditional medicine in Iraq can be traced back to the Sumerian period (3000-1970 B.C.) and then to the Babylonian and Assyrian periods (1970-589 B.C.). Babylon and Nineveh were the tow centers of civilization around 2000 B.C. Hammurabi who ruled Babylon between 1728-1686 B.C. issued 285 mandatory declarations, one of which particularly referred to medicine and medicinal plants. This declaration stated that a man practicing medicine must be well acquainted and must be authorized. A physician was called Hakim and most of the Hakims were using medicinal plants for healing of different ailments. Among the famous Hakims were Baker Al-Razi (850 - 923 A.D.) who wrote 184 articles and books, Ibin Sina (Avicenna) (980-1038 A.D.) wrote Al-Quanon fil-Tib (Law of Medicine) covering five

volumes and many others. Among the famous pharmacist in Iraq was Abdullah Ben Ahmad Albetar (1021–1080 A.D.), an Arabic botanist and pharmaceutical scientist (Al-Khalili, 2010).

During the past decade, traditional systems of medicine have become a topic of global importance. Current estimates suggest that, in many developing countries, a large proportion of the population rely heavily on traditional practices and medicinal plants to meet primary health care need, although modern medicine available in these countries, herbal medicine have often maintained popularity for historical and cultural reasons. Concurrently, many people in developed countries have begun to turn to alternative or complementary therapies including medicinal herbs (Al-Douri, 2000; WHO, 1999).

The home remedies are as old as evolution of mankind in Iraq. The reliance on herbal medicine and the uncontrolled collection of medicinal plants might cause the disappearance of some rare medicinal herbs in Iraq, and will add more plants to the list of the endangered plant species. Few plant species that provide medicinal benefits have been scientifically evaluated for their possible medical application. Safety and efficacy data are available for even fewer plants, their extracts and active ingredients, and the preparations containing them. Adequate experience and proper handling of herbal medicine requires the licensing of knowledgeable and professional herbalists and regulating the procedures of medicinal plants handling, storage and method of use in order to avoid mistreatment and malpractice (Abu- Irmailleh and Afifi, 2003).

The WHO aim concerning the herbal medicine worldwide is to support two goals, namely: "promote the rational use of these herbs and encourage research for evaluation of the safety and efficacy of herbal medicines" (Tilburt, 2008; WHO, 1998). World health organization, also stated that a large number of population in the developing countries still rely on herbal medicine to meet their healthcare needs (Mahady, 2001). Strikingly, even in most developing countries, the herbal medicine market is poorly regulated, and herbal products are often neither registered nor controlled (Ajazuddin and Saraf, 2012; Saad and Said, 2011). Assurance of the safety, quality, and efficacy of medicinal plants and herbal products has now become a key issue in both industrialized and developing countries. Both general consumer and health care professionals need up-to-date and authoritative information on the safety and efficacy of medicinal plants (Tyler et al.,

1998). Adequate experience and proper handling of herbal medicine requires the licensing of knowledgeable and professional herbalists and regulating the procedures of medicinal plant handling, storage and method of use.

In the present paper, emphasis is given on both the safe and unsafe herbs sold in the herbalist shops together with the parts used, the way they are used as recommended by herbalists. In addition, the traditional background of social, cultural, medical entities of the herbalists and finally, general observations on the herbalists' shops with general observations on controversial points when dealing with this kind of practice.

## **MATERIALS AND METHODS**

### **DATA COLLECTION**

For over a period of 3 years, 75 herbalists in Iraq where interviewed; some from big cities, while some others from villages. The survey was conducted during the period 2009-2011. The age of the herbalists ranged between 25-68 years. Most of the herbalists in the study belong to families which have a strong connection with this practice as they inherited these shops from their fathers and grandfathers.

The herbalists were informed that they have the right to refuse responding to inquiries of the interviewers, and they are free to withdraw at any time. Interview length ranged from 60-90 min. In planning the methodology for this study the team used questionnaire approach and overt observation over this time length. Data collected through the interview were registered for each sample of plants included in this paper.

The information given on selling, prescribing and the use of the part of medicinal plants were immediately registered. The interview also aimed to assess several aspects such as herbal sources of the medicinal plants. The questionnaire was structured to summarize the answer on the following aspects:

- The plants sold, parts used for medical purpose, method of use and purpose of use.
- Level of education of herbalists.
- Observation on herbalist shops (storing, packing, weighing).
- Recommendation given by each herbalist.

**Table 1.** List of the common medicinal plants found in the herbalists' shops in Iraq. Numbers in this table refer to the herbalists' recommendations.

Number	Family name	Scientific name and Herbarium specimen code	Local name	Parts used	Recommended use by the herbalists
1.	Anacardiaceae	<i>Rhus coriara</i> L. ( Anac.1)	Summak	fruits	1
2.	Asteraceae	<i>Anthemis nobilis</i> L.(Aster.1)	Babonage	flowers	2
3.		<i>Matricaria chamomilla</i> L.(Aster. 2)	Babonage	flowers	2
4.		<i>Carthamus tinctoris</i> L.(Aster.3)	Khortom	flowers	
5.		<i>Artemisia campestris</i> L.(Aster.4)	Sheeh	leaves	4
6.	Laminaceae	<i>Mentha piperita</i> L.(Lami.1)	Neana'a	leaves	5,6
7.		<i>Thymus vulgaris</i> L.( common thyme) (Lami.2)	Zaetar	leaves	7
8.		<i>Melissa Officinalis</i> L.(Lami.3)	Melessa	leaves	8
9.	Lauraceae	<i>Cinnamomum zeylanicum</i> L.(Laur.1)	Darceen	barks	5,9
10.	Fabaceae	<i>Glycyrrhiza glabra</i> L.(Faba.1).	Erksoos	roots	4,10,11
11.		<i>Trigonella Foenumgraceum</i> L.(Faba.2)	Helba	seeds	12,13
12.		<i>Cassia senna</i> <i>Cassia acutifolia</i> , <i>Cassia angustifolia</i> ( Faba.3)	Sana Makee	leaves	14
13.	Malvaceae	<i>Hibiscus subdarifa</i> L.( Malva.1)	Shaie Kogarat	flowers	15
14.	Myrtaceae	<i>Eugenia caryophyllus</i> Spreng(Myrt.1)	Krenfel	flowers	6,16
15.	Apiaceae	<i>Foeniculum vulgare</i> L.( Apia.1)	Habit Helwa	fruits	5,6
16.		<i>Carum carvi</i> L.(Apia.2)	Carawaya	fruits	5,6....
17.		<i>Pimpinella anisum</i> L.(Apia.3)	Yansoon	fruits	5,6.....
18.	Ranunculaceae	<i>Nigella sativa</i> L.(Ranun.1)	Habat Soda'a	seeds	17,18,19,20...
19.	Zingiberaceae	<i>Elettaria cardamomum</i> L.(Zing.1)	Heal	roots	5,6....
20.		<i>Zingiber officinale</i> Rosco(Zing.2)	Erk Ha'ar	roots	5,6,21,22,23,24
21.		<i>Curcuma longa</i> L.(Zing.3)	Kurkum	roots	7,8,25,26

## PLANT MATERIAL

Samples taken from each medicinal plant found in the herbalists shops were verified, confirmed and identified taxonomically by the staff members of the national herbarium of Iraq (NHI). A medicinal use was accepted as valid only if it was mentioned by at least three

independent herbalists. Each specimen was given a number, and samples were kept in the Faculty of Pharmacy, University of Baghdad. The plant materials were classified into two categories:

- Those commonly sold by herbalists.
- The less commonly sold herbs.

## RERULTS

Common medicinal herbs which are known to all herbalists are listed in Table 1 by their scientific and local names; parts used and recommended use by the herbalists. This table does not include the types of preparations for the mentioned medicinal

herbs, since the most recommended methods for use are either decoction or infusion such as herbal tea, with instructions on how to take them once or twice daily using one or two teaspoonful with a glass of water. These plants are very well known to be safe without side effects. Table 2 lists the same above mentioned information with regard to the less commonly used medicinal plants. Most of the herbalists interviewed in this study (60%), deal with the well-known, safe medicinal herbs. Yet the list of the less common herbs is not to be overlooked. One of the first observations made during the study was that, although almost all herbalists claimed to be experts in traditional medicine, none was found to be licensed to dispense herbal medicine and nearly (70%) of them lacked even the preliminary school education. It was also observed that the herbalist dispenses not only locally grown medicinal plants, but also imported medicinal herbs. The increasing number of the herbalists in the cities is probably influenced among other criteria by socio-economic factors as a result of rapid urbanization. A further observation was that several uses were frequently claimed for the same plant. Moreover, several odd recommendations were recorded such as *Coriandrum sativum* as aphrodisiac, *Anthemus nobilis* as emetic, *Juniperus communis* for rheumatism.

None of the herbalists were aware of the fact that the amount of the active constituents in different plants may vary in quantity and quality depending on the habitat, season of harvest, plant age, storage conditions and storage duration. Also, they were unaware of the fact that some constituents, may rise to toxic level in known safe medicinal plants. For example the nitrate level may rise in many medicinal plants (Takruri and Humeid, 1988) and even in edible plants (Uwah et al., 2009). There are many researches which have been done linking many health issues with high nitrate intake, like the link between nitrate and digestive diseases or even stomach cancer (Mitsui and Kondo, 1999). Hence, the herbalists should be aware of these facts in order to prevent hazardous effects. Similar observations were reported for high oxalate content in a variety of medicinal plants in Iraq (Mohmod et. al., 1988). Again the relation between oxalate and the formation of renal stones is obvious (Curhan 1999). Another interesting observation was the fact that the medicinal plants were usually recommended for relatively long periods of time, which may be six months or even longer. The

herbalists however, seem to be unaware of the side effects of the prolonged use which may lead to health complications due to the fact that some constituents may accumulate to toxic levels. It has been reported that some safe plants like sage, *Salvia officinalis*, if taken in large quantities may lead to epileptic seizures (Burkhard et. al., 1999), another example is fennel, *Foeniculum vulgari*, which have different chemotypes, some of these chemotypes essential oil contains larger quantity of the monoterpene fenchone, which has convulsing activity (Burkhard et. al., 1999). The herbalists were also usually unaware of the interaction that may occur, with either other medicines or food taken at the same time during the treatment period (Philp, 2004). Another interesting point worth mentioning is the use of non-specific slang or vague terms in describing folk use and effects. Most illnesses mentioned were not indicating a specific disease, but rather common symptoms, such as abdominal pain or headache, which might accompany different diseases.

Many of the plants sold in herbalist shops were imported and stored for unlimited periods of time, in unventilated stores. Moreover many plant materials cross the borders from neighbouring countries without proper inspection or verification. Sometimes, even if the plant material exists in the country, the same plant species were said to be imported due to the competitive market prices or due to the fact that the locally collected ones cannot cover the domestic demand. It was also observed that different local names are used for the same scientific names of the herbs in different Arab countries, which may result in taking the wrong herb. For example; Shomer or Habit Helwa are used both for the same plant fennel; *Foniculum vulgari*. Other examples are the local names; Darseen or Kerfa for cinnamon; *Cinnamomum Zeylanicum*, and krenfel or Mismar for clove buds; *Eugenia caryophyllus*, other examples are listed in Table 3, sometimes one local name is used simultaneously for several species of related or unrelated genera, for example Kheshkash is used for opium in Iraq, but the same name is used for Citrus medica L. Rutaceae in Palestine and Morocco while the name is correct only for opium, *Papaver somniferum*.

## DISCUSSION

Medicinal plants have been prescribed and used

**Table 2.** List of less common medicinal plants found in herbalists' shops in Iraq.

Number	Family name	Scientific name and Herbarium specimen code	Local name	Parts used	Recommended uses by the herbalists
1.	Araceae	<i>Arum palaestinum</i> Boiss. ( Arac.1)	Luf	Corm	26
2.	Amaranthaceae	<i>Celosia Cristata</i> L.( Amar.1)	Erf Aldeek	Flower	1
3.	Amaryllidaceae	<i>Narcissus tazetta</i> L.( Amar.2)	Nergis	Roots	14,27
4.	Aristolochiaceae	<i>Aristolochia maurorum</i> L.( Arist.1)	Zernd	Whole plant	28
5.	Asclepiadaceae	<i>Calotropa Procera</i> Ait.(Ascl.1)	Debage	bark of roots	4
6.	Betulaceae	<i>Belula alba</i> L.( Betul.1)	Tamool	Flowers barks oil	29 30 11
7.	Boraginaceae	<i>Anchusa officinalis</i> L.( Borag.1)	Sak Alhamam	Stems	5
8.		<i>Anchusa italica</i> Bugloss(Borag.2)	Ward maoy	Flowers	31
9.	Cannabaceae	<i>Cannabis sativa</i> L. ( Canna.1)	Hashisha	Seeds	31
10.	Adoxaceae	<i>Sambucus nigra</i> L.( Adox. 1)	Khoman	Barks	32,34
11.	Caprifoliaceae	<i>Sambucus ebulus</i> L.(Capri.1)	Khoman Aswad	flower leaves	2,11 29
12.	Asteraceae	<i>Arctium lappa</i> L. ( Aster.1)	Erkteon	Roots	29,32
13.		<i>Artemisia campestris</i> L. ( Aster.2)	Sheeh	Herb	4,33,34
14.		<i>Calendula officinalis</i> L. ( Aster.3)	Ekhewan Athereon	Fruits	35,36.
15.		<i>Erigeron Canadensis</i> L.(Aster.4)	Thewel Altheeb	Herb	36
16.	Brassicaceae	<i>Brassica nigra</i> Koch( Bras.1)	Kherdel	Seeds	37,38
17.		<i>Brassica rapa</i> L.( Bras.2)	Shalgem	Herb	11,38
18.	Cucurbitaceae	<i>Citrullus colocynthis</i> L. ( Cucur. 1)	Hantheel	fruits ,seeds	12,36
19.		<i>Cucumis sativus</i> L.( Cucur.2)	Khiar May	Fruits	39
20.	Cyperaceae	<i>Cyperus rotundus</i> ( Cyper.1)	Si'ed	Tubers	5,13
21.	Ephedraceae	<i>Ephedra alata</i> Decne.( Ephed.1)	A'alenda	whole plant	40
22.	Euphorbiaceae	<i>Euphorbia helioscopia</i> L.( Euph.1)	Khenak Aldagag	Roots	34
23.	Fagaceae	<i>Quercus persica</i> Juab. and Spach. ( Faga.1)	Baloot	Fruits	41
24.	Poaceae	<i>Cymbopogon Schoenanthus</i> Spreng.(Poac.1)	Athkor	Leaves fruits	41

Table 2. Contd.

25.	Iridaceae	<i>Crocus sativus</i> L.( Irida. 1)	Za'afaran	stigmas filaments	41,43 44
26.	Laminaceae	<i>Calamintha Graveolens</i> M.B. ( Lami.4)	Rehan Baree	Seeds	9,44
27.		<i>Mentha longifolia</i> L. ( Lami.5)	Badeekh	Herb	5
28.		<i>Ocimum basilicum</i> L.( Lami. 6)	Rehan Almalk	Leaves	5
29.		<i>Origanum vulgare</i> L.( Lami. 7)	Rehan gabeli	Herb	5
30.		<i>Teucrium polium</i> L.( Lami. 8)	Gea'ada	Leaves	45
31.		<i>Thymus ketochyanus</i> Boiss ( Lami.9)	Za'ater	leaves flowers	45
32.	Lathyraceae	<i>Ammania baccifera</i> L.( Lath.1)	Regelhamam	Leaves	46
33.	Fabaceae	<i>Alhagi graecorum</i> Bioiss ( Faba.3)	Akool	Stem gum	14,20
34.		<i>Astragalus tribuloides</i> Del.( Faba. 4)	Kafeha gerna	whole herb	19
35.		<i>Cassia occidentalis</i> L.( Faba. 5)	Kasia	whole plant	33
36.	Liliaceae	<i>Allium cepa</i> L.( Lili.1)	Basal	Bulbs	2,12
37.		<i>Allium sativum</i> (Lili.2)	Thoom	Bulbs	15,47
38.		<i>Aloe vera</i> L.( Lili 3)	Sabor	leaves, juices	14
39.		<i>Asparagus officinalis</i> L.( Lili .4)	Helion	Rhizome	2
40.		<i>Colchicum candidum</i> L.( Lili . 5)	Mabsharat Alsheta'a	Corms	29
41.	Linaceae	<i>Linum usitatissimum</i> L.( Lina. 1)	Ketan	Seeds	49,50
42.	Malvaceae	<i>Althaea rosea</i> . Malv.1	Khatma Baree	seeds flowers	37
43.		<i>Malva neglecta</i> L.( Malv.2)	Khobaiza	leaves , flowers	27
44.	Moraceae	<i>Ficus cunia</i> Buch. Hom ( Mora. 1)	Teen Baree	Fruits	50
45.		<i>Morus alba</i> L. ( Mora. 2)	Toot Baree	Leaves	52
46.	Myristicaceae	<i>Myristica fragrance</i> Houtt. (Myris. 1)	Joaz Abu'a	Seeds	6

Table 2. Contd.

47.	Myrtaceae	<i>Eucalyptus camaldulensi</i> Dehnh. ( Myrt.2)	Kalbtos	oil of leaves	52
48.	Oleaceae	<i>Fraxinus ornus</i> L.( Olea.1)	Lisan Alazfoor	plant Juice	14
49.		<i>Jasminum officinale</i> L. ( Olea.2)	Yasmeen	Flower	8
50.		<i>Olea europea</i> L. ( Olea. 3)	Zait Alzaytoon	oil, leaves	45,53
51.	Palmaceae	<i>Phoenix dactylifera</i> L. ( Plam. 1)	Tamer	Fruits	54
52.	Papaveraceae	<i>Papaver Rhoeas</i> L.( Papa .1)	Keshkash Menthor	Flowers	2
53.	Cupressaceae	<i>Thuja occidentalis</i> L.( Cupr.1)	Afa'as	Barks	34,55
54.	Polygonaceae	<i>Plygonum aviculare</i> ( Poly.1)	Asa'a Alraee	Herb	10,4,56
55.		<i>Rheum ribes</i> L. ( Poly.2)	Rawend	Roots	14
56.	Adiantaceae	<i>Adiantum capillus veneris</i> L. ( Adia.1)	Krefs Albeer	whole plant	2,4
57.	Portulacaceae	<i>Portulaca oleracea</i> L. ( Portu.1)	Barbeen	Seeds	57
58.	Ranunculaceae	<i>Adonis aestivalis</i> L.( Ranun. 2) <i>Delphinium ajacis</i> L.( Ranun. 3)	Aen Aldeek	seeds	30,58
59.	Rhamnaceae	<i>Zizyphus jujuba</i> Mill.( Rhamn.1) <i>Zizyphus spina-christi</i> L.( Rhamn.2)	Lisan Alesfor Nabok Nabok	seeds aerid parts leaves, bark	59 60 41 16
60.	Rosaceae	<i>Agrimonia eupatoria</i> L. ( Rosa.1)	Khafith	aerial part	41
61.		<i>Amygdalus communis</i> L. var. amara ( Rosa. 2)	Loz Mor	Seeds	49,50
62.		<i>Amygdalus communis</i> L. var. dulcis ( Rosa.3)	Loz Helo	Seeds	50
63.		<i>Rosa canina</i> L. ( Rosa. 4)	Ward Baree	Seed	61,62
64.		<i>Rosa centifolia</i> L.( Rosa. 5)	Ward Jory Baree	Flowers	5
65.	Nitrariaceae	<i>Peganuim harmala</i> L.( Nitra.1)	Harmal	seeds flame	63
66.	Salicaceae	<i>Salix alba</i> L.( Sali.1)	Sefsaf	aerial parts	11, 16

Table 2. Contd.

67.		<i>Salix purpurea</i> L.( Sali.2)	Sefsaf	Barks	33
68.	Scrophulariac-eae	<i>Bacopa monnieri</i> L.( Scro.1)	Berben Baree	Herb	64
69.	Solanaceae	<i>Capsicum frutescens</i> L. ( Sola.1)	Filfil Dara	Fruits	44,65
70.		<i>Solanum nigrum</i> L.( Sola.2)	Erab Altheeb	leaves ,fruits	33,43
71.	Apiaceae	<i>Ammi visnaga</i> L. ( Apia.4)	Khella, khezaran	Seeds	40,66
72.		<i>Conium maculatum</i> L ( Apia.5)	Shokran	fruits , leaves	8.31
73.		<i>Coriandrum sativum</i> L.( Apia.6)	Kozbara	Leaves	41,65,66
74.		<i>Cuminum cyminum</i> L.( Apia.7)	Kammon	Seeds	5,44
75.		<i>Eryngium creticum</i> L.( Apia . 8)	Kasoob	leaves , roots	54
76.		<i>Petroselinum sativum</i> Hoffm. (Apia. 9)	Ma'adanos	fruits, leaves	3 5,50
77.	Urticaceae	<i>Urtica dioica</i> L.( Urti.1)	Qurrais	leaves stems	36,47,67
78.		<i>Urtica piluifera</i> L.( Urti.2)	Qurrais	leaves, stems.	36,47,67
79.	Verbenaceae	<i>Verbena officinalis</i> L.( Verb.1)	Regel Alhamam	Herb	44,54,68
80.		<i>Vitex agnus-castus</i> L.( Verb.2)	Kaf Mariam	Whole plant	2,7,41
81.	Vitaceae	<i>Vitis vinifera</i> L.( Vita.1)	Enab	Fruits	44
82.	Violaceae	<i>Viola odorata</i> L.(Viol.1)	Banafsag	Flowers	19,69

worldwide for centuries, with a strong belief in their ability to cure certain diseases (Kambizi and Afolayan, 2008). Recently, the evidential increase of publications concerning medicinal plants, is paralleled to an increase in sales of medicinal herbs in both crude state and different pharmaceutical dosage forms. Thus supporting the rediscovery, of the importance of medicinal plants (Strohl, 2000). The use of herbal remedies in recent years has expanded exponentially in search of new medical entities or novel lead nuclei with potential to manage various diseases. Historically, nature has supplied our markets with a huge number of modern medications.

In fact about 50% of drugs that successfully passed the clinical trials were derived from natural sources (Newman and Cragg, 2007). Fortunately it is estimated that less than 10% of total species of higher plants has been chemically and pharmacologically explored, leaving much room for future discoveries (Cragg and Newman, 1999).

Current estimates suggest that in many developing countries, a large proportion of the population relies heavily on traditional healers and medicinal plants to meet primary healthcare needs. Although modern medicine may be available in these countries, herbal medicines have often maintained popularity

for historical and cultural reasons. Concurrently, many people in developed countries have begun to turn to alternative or complementary therapies, including medicinal herbs. World Health Organization (WHO) estimated that the world market for herbal medicines and herbal- products is still on the rise.

Iraq is a country that has diversity in its geographical nature and ecosystems. The latter is reflected in the differences in its flora. In fact it is estimated that no less than 363 medicinal plant species belonging to about 270 genera from approximately 98 families (Mohmod et. al., 1988; Ghazanfar 1994;

**Table 3.** List of some plants having different names in different Arabic Countries.

<i>Cinnamomum zeylanicum</i> L.	Darceen (Iraq), Kerfa (Jordan)
<i>Eucalyptus species</i>	Eucalyptos (Iraq), keena (Jordan)
<i>Emmi visnaga</i> L.	Khezran (Iraq), Khella (Egypt, Jordan)
<i>Eugenia caryophyllus</i> Spreng	Krenfal (Iraq), Mismar (Jordan)
<i>Hibiscus subderifa</i> L.	Shaie Kogarat (Iraq), Kurkadea (Egypt, Jordan)
<i>Myristica fragrance</i> Houtt.	Joaz Alboa`a (Iraq), Joaz Alteeb (Jordan, Palastine, Saudia Arabia)
<i>Nigella sativa</i> , L.	Habat Soda`a (Iraq), Habat Albaraka (Soudia Arabia)
<i>Origanum vulgare</i> , L.	Rehan Jebelee (Iraq), Mardkosh (Jordan)
<i>Ocimum basilicum</i> L.	Rehan Almalk (Iraq), Habak (Jordan)
<i>Papaver rhoeas</i> L.	Kheshkash Manthoor (Iraq), Shaka (Jordan)
<i>Portulaca oleroceae</i> L.	Berbeen (Iraq), Bakla (Jordan)
<i>Rheum officinale</i> L.	Sharash Alrabas (Iraq), Rawend (Egypt)
<i>Sumbucus nigra</i> L.	Khoman (Iraq), Bailsan (Jordan)
<i>Zingiber officinale</i> Roscoe	Erk Ha`ar (Iraq), Zanjabeel (Jordan, Egypt, Saudia Arabia)

Chakravarty, 1976) exist in Iraq. Most herbal medicines still need to be studied scientifically, although the experience obtained from their traditional use over the years should not be ignored, as there is not enough evidence produced by common scientific approaches to answer questions of safety and efficacy about most of the herbal medicines now in use. The rational use and further development of herbal medicines will be supported by further appropriate scientific studies of these herbs, and thus the development of guidelines for such studies is very important issue. These guidelines define the basic criteria for the evaluation of quality, safety, and efficacy of herbal medicines with the goal of assisting national regulatory authorities, scientific organizations, in assessing, documentation, submissions, and dossiers in respect of the herbal plants as well their herbal –

products.

Both the general consumer and healthcare professionals need up-to-date, authoritative information on the safety and efficacy of medicinal plants. With the widespread use of traditional herbal medicine and the rapid expansion of international herbal medicine markets, the development of national policies and regulations on herbal remedies has become an important concern for both health authorities and the public in order to promote the recognition of this system and modalities, and further define their role in modern healthcare systems. National policies and regulations on herbal remedy could ensure the safety, quality, and efficacy of these therapies and products and function as important steps toward integrative healthcare systems. However, relatively few countries have developed policies and

regulations on herbal medicine so far. Only 25 of WHO's 191 member countries have a national policy on traditional herbal medicine and only 64 countries regulate herbal remedy practices (WHO, 1993). To assist countries in the development of herbal remedy policies, WHO has published a series of technical guidelines and reviewed regulations on herbal medicines in the document "Regulatory Situation of Herbal Medicines: a Worldwide Review (WHO, 1998). The purpose of the document is to share national experience in formulating policies on traditional medicinal products, introduce measures for their registration and regulation, and facilitate information exchange on these subjects among Members.

This goal stressed the need for assessment of efficacy including the determination of pharmacological and clinical effects of the active ingredients, cultivation and collection of the medicinal plants, and labelling which includes a quantitative list of active ingredient, dosage, and contraindications Guideline "Quality of Herbal Medicinal Products." This includes plants, parts of plants, and their preparations, mostly presented with therapeutic or prophylactic claims.

Thus summarizing the use of the herbal medicine by people in Iraq could be attributed to affordability, accessibility and their potential to treat diseases.

Therefore meeting the challenges of herbal medicine uses in Iraq requires a strategy which must include the following:

- National policy and regulatory framework for the safety, quality, efficacy and rational use of these herbs.
- The creation of national herbal medicine policy help define the role of traditional medicine in national health care system by putting a mechanisms in place for insuring availability, accessibility and appropriate use.
- Protecting medicinal plants, protecting indigenous knowledge and intellectual property encouraging innovative indigenous knowledge research, Proper use by healers and consumers.
- Ministry of health must establish a training program for traditional herbalists and health workers at conventional training schools.
- Promote recognition of these systems and modalities, and further define their role in modern healthcare systems nationwide.

Numbers in this column refer to the following herbalists' recommendations:

1.diarrhea, 2. common cold, 3.menstrual pain, 4. productive cough, 5. flatulence, 6. flavoring, 7.dry cough, 8. nervousness, 9. as stimulant 10. ulcer, 11. rheumatism, 12. diabetes, 13. as diaphoretic. 14. constipation, 15. hypertension, 16.toothache, 17. to improve immunity of body, 18. for allergy, 19. as demulcent, 20. as emollient, 21. decongestant, 22. motion sickness, 23. purative, 24. chemopreventive of cancer, 25. hepatitis, 26. obesity, 27.induce emesis in cases of poisoning, 28. poultice for wounds and lipracy, 29. Gout, 30. anurea, 31.insomnia, 32. skin burns, 33.fever, 34. as anthelementic, 35. arthritis, 36. uterus bleeding, 37. sore throat, 38. vertigo, 39. skin dryness, 40. asthma, 41. abdominal pain, 42. help cure of wounds 43. male impotence, 44. general weakness, 45. hemorrhoids, 46. abscess of skin 47. alopecia, 48. weaning, 49. eczema, 50. dermatological disorders, 51. skin inflammation, 52. tonsillitis, 53. hypercholestremia. 54. anemia, 55. bleeding, 56. gum bleeding . 57. gall bladder stones , 58. heart failure, 59. head lice, 60. tuberculosis, 61. kidney stones. 62. colitis, 63. as insect repellent, 64. epilepsy, 65. indigestion, 66. angina, 67. blood coagulation, 68. cancer, 69. headache.

## CONCLUSION

This study reveals the uncontrolled practice of herbalists in Iraq. This necessitates the establishment of a control system covering proper inspection and licensing of the herbalists, a regulatory control of handling, storage and methods of use, especially when dealing with less commonly used medicinal herbs (Al-Douri and Al-Essa, 2010). More over users of herbal remedies need validated information on the safety and efficacy of medicinal plants (Tyler et. al., 1998). The collection of endangered plant species should be restricted, and the collection of the medicinal plants should be supervised. Traditional medicine is neither accepted nor rejected, but it should be examined both closely and continuously (Al-Douri and Al-Essa, 2010).

## ACKNOWLEDGMENT

The author wish to express deep thanks to the staff member of the National Herbarium of Iraq for their verification of plant samples and to Dr. A. Husain for

English revision of this script.

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