The Most Medicinal Plants Used in Iraq: Traditional Knowledge

Nahida ALBAYATY

Department of Biology Ecole Normal Superior, Kouba, Alger, Algeria

ABSTRACT

The most medicinal plants used in Iraq will be identified in this work, and the popular medical heritage in Iraq by some of the old prescriptions prepared from a mixture of herbs, which is still used to the present day. This work will be in two axes, the first axis contains a comprehensive knowledge of the plants mentioned in this work, and the second axis will clarify the therapeutic qualities of ancient medical heritage of the Iraqis still in use until the present. This work demonstrates the most important medicinal plants used in Iraq and the old prescriptions, especially they are useful, because they had been tried and successful. This research will have continuity for other medicinal plants with old Iraqi recipes.

Key words: Tradition in Iraq, Senna, Alseidd, Shefallah, chemical composition.

Introduction

The use of medicinal plants in Iraq goes back thousands of years, and the clay tablets of Sumerian and Babylonian civilization clarified the use of many different methods of treatment by medicinal plants. The evolution of the use of medicinal plants continued through the ages, especially in a time of the Abbasid state, where the sciences reached its peak, and the first pharmacy in the world was in Baghdad in the late of eighth century AD. So, the herbal therapy is of the things ancient and well-known in Iraqi society, a source of healing for many diseases, and a lot of people trust their effectiveness in the treatment and healing. In the light of this work, we have clarified some of the medicinal plants widely used in Iraq (scientific name, local name, description of the plant…ect).as well as the traditional prescriptions, which are still used until now.

Materials and methods

This work is a theoretical research depends on the study of the most important medicinal plants used in Iraq for the purpose of treatment. For that, this research was in two axes.

In the first axis, we made a card and database technology for more than ten medicinal plants used in Iraq. The second axis explained some of the old recipes, which we obtained through the elderly, as well as the traditional books.

The First Axis:

Card and Database Technology of 10 plants mentioned in this work, which are given below in alphabetical order.

1- Balangu:

The scientific name: Lallemantia royleana Benth. Local name: Balangu. Family: Lamiaceae

Origin: Originally native to tropical Asia, It is found throughout Afghanistan Turkestan and northern India.

Description of the plant: It is a hairy, tender low-growing herb. It grows between 20-60 cm tall, with opposite, light green, silky leaves. The flowers are white, in whorls in the axils of the leaves. The plant tastes somewhat like anise, with a strong,
pungent sweet smell.

The Parts used: Seeds

The Main Constituents: Seeds contain linoleic, palmitic and stearic acid, beta-sitosterol. Gum contains L-arabinose, L-rhamnose, pentasans Protein. Amino acids are also found in the plant.

Balangu Seeds:

\[ \text{Balangu seeds} \]

Medical Uses:

The moistened seeds are useful in abscesses and inflammations. They are considered to be astringent, cardiac tonic and carminative.

Medical uses in Iraq: Balangu seeds used in soft drink to treat stomach warmness and intestinal troubles, and in treatment of abscesses (dimples).

2- Caper Bush:

The scientific name: Capparis spinosa.
Local name: Shefellah.
Family: Capparidaceae.
Origin: Mediterranean area, western or central Asia.

Description of the plant: It is an evergreen, spiny, trailing, deciduous shrub growing up to 1-2 m in height. Leaves are alternate, round to ovate, thick, and glistening. Leaf stipules may be formed into spines. Flowers are white with numerous violet stamens. Seeds are large, kidney shaped, and gray-brown in color.

The Parts used: All parts of the plant.

The Main constituents: Bitter flavonoid glycosides, mustard oil glycoside and rutin.

Medical Uses:

Diuretic, repelling gas, disinfectant to the kidneys, treatment of low back.

Medical uses in Iraq: Desinfectant to the kidney, repelling gas and treatment of low back.

3- Colocynth:

The scientific name: Citrullus colocynthis.
Local name: Hanthale.
Family: Cucurbitaceae.
Origin: Native of Turkey also found in Africa and Asia.

Description of the plant: It is an annual plant resembling the common watermelon. The stems are herbaceous and beset with rough hairs, the leaves stand alternately on long petioles. They are triangular many cleft, variously sinuated, obtuse, hairy, a fine green on upper surface, rough and pale under. Flowers yellow, appearing singly at axils of leaves, fruit globular, size of an orange, yellow and smooth, contains a white spongy pulp enclosing numerous ovate compressed white or brownish seeds.

The Parts used: Pulp and seeds.

The Main constituents: The pulp contains colocynthium, gum, pectic acid, calcium, magnesium, phosphates, lignin and water.
Medical Uses:

Treatment of hemorrhoids, rheumatism, reducing blood sugar, purgative.

Medical uses in Iraq: Used for the treatment of rheumatism; constipation and hemorrhoids.

4- Lime:

The scientific name: Citrus aurantifolia.
Local name: Noomi-Basorah.
Family: Rutaceae.
Origin: Native to Southeast Asia. It was cultivated for centuries throughout Asia and the Middle East.

Description of the plant: An evergreen shrub or much branched tree up to 5m in height, many sharp spines on stems and beside leaves, aromatic, shiny green leaves, 6-8 cm long, oval in shape. Fruit round or oval, to 6 cm in diameter but usually smaller, thin, ripening to yellow, although often used when green. Lime tends to be more aromatic in flavor and scent than other limes.
The Parts used: Leaves, fruit, peel and oil are used.
The Main constituents: Lime pericarp contains an essential oil whose main components are citral, limonene, β-pinene and fenchone. Further aroma compounds are terpineol, bisabolene and other terpenoids.

Medical Uses:

Antiseptic, anti-viral, cough, cold, congestion, astringent, restorative and tonic.

Medical uses in Iraq: The dried lime used in Iraq for stomach cramps, flatulence, intestinal spasms and inflammations. Dried limes

5- Maidenhair:

The scientific name: Adiantum capillus-veneris.
Local name: Krafs alber.
Family: Adiantaceae.

Origin: Southern Europe.

Description of the plant: It grows to 20-70 cm tall, with very delicate light green fronds, much subdivided into pinnae 5-10 mm long and broad, the frond rachis is black and wiry.
The Parts used: Fronde.
The Main constituents: The leaves contain flavonoids, terpenes, tannins and proanthocyanidins of mucilage

Medical Uses:

It is used against cough, bronchitis, nasal secretions abundant and tracheitis.

Medical uses in Iraq: Mixed with other herbs to break up the gravel and sand in the kidney.

6- Senna:

The scientific name: Cassia acutifolia.
Local name: Sanna Makki.
Family: Caesalpiniaceae.
Origin: Tropical Africa.

Description of the plant: It is a plant with pale green stems and branches reaching up to 60 cm in height. The alternate leaves are even-pinnate, with four or five pairs of lanceolate or obovate leaflets that are brittle and grayish green in colour. The small yellow flowers are characterized an oblong pod about 5 cm long. The Parts used: Dried leaves, dried fruits (pods). The Main constituents: Anthracenic derivatives, free anthraquinones and anthracenosides, etersides, minerals.

Medical Uses: Cathartic, laxative.

Medical uses in Iraq: Treatment of constipation.

Dried limes

5- Maidenhair:

The scientific name: Adiantum capillus-veneris.
Local name: Krafs alber.
Family: Adiantaceae.
7- Shaterag:

The scientific name: Fumaria parviflora.
Local name: Shaterag.
Family: Fumariaceae.
Origin: It is native to Europe, Asia and Africa, but it is widely distributed in many other parts of the world.
Description of the plant: Annual herb, up to 15-40 cm, erect or climbing plant. The flower stalks have approximately 20 white or pink-flushed flowers with blakish-red tips on the lateral petals. The small leaves are divided into narrow segments.
The Parts used: The leaves and the seeds.
The Main constituents: The plant contains the alkaloids fumarine, protopine and adlumidicaine, isoquinoline alkaloids, lahorine and lahoramine.
Medical Uses: The plant is used as an anthelmintic, laxative and for treating dyspepsia, also used for skin disorders, the seeds are used as fomentation in painful swelling, against stomach pain, febrifuge and blood purifier.
Medical uses in Iraq: It is used for treating skin disorders.

8- Souchet Round:

The scientific name: Cyperus rotundus.
Local name: Alseid.
Family: Cyperaceae.
Description of the plant: It is an herbaceous perennial with purple-brown, bisexual flowers. The fruit is a three-angled achene. The leaves are dark green, grass-like, with a prominent vein on the underside. The root system of a young plant initially forms white, fleshy rhizomes. Some rhizomes grow upward in the soil, then form a bulb-like structure from which new shoots and roots grow, and from the new roots, new rhizomes grow.
The Parts used: Tuberous roots, tubers.
The Main constituents: The rhizome contains: Flavonoids, alkaloids, saponins and fatty oils (glycerides).
Medical Uses: Stimulant, tonic, diuretic, stomach, diaphoretic, astringent and vermifuge.
Medical uses in Iraq: For treating fever, digestive system disorders (nausea, diarrhea…).

9- Tormentil:

The scientific name: Potentilla erecta.
Local name: Irk-alinjibar.
Family: Rosaceae.
Origin: The original habitat of this plant is the temperate areas in Asia and Europe.
Description of the plant: It is a creeping herbaceous plant with height up to 15 cm. Palmate leaves with 3-5 leaflets and many four-petalled flowers.
The Parts used: Roots, leaves, flowers.
The Main constituents: Tannin, tormentilline, chinoric-acid, kinovic acid, starch and other sugars.
Medical Uses: Antibiotic, astringent, enuresis, haemostatic, hypoglycaemic, odontologic.
Medical uses in Iraq: For women:-To stop heavy bleeding.

10- Horse-mint:

The scientific name: Mentha longifolia.
Local name: Botnige.
Family: Lamiceae.
Description of the plant: Horse Mint is an aromatic perennial herb. Stem erect, leaves lanceolate, ovate or oblong, tooth, nearly sessile arranged opposite on stem. Flowers small, lilac in whorls forming slender spike often interrupted below, borne at the ends of branches and forming a lax densely hairy inflorescence.
The Parts used: Leaves, flowers.
The Main Constituents: The main constituents of water mint oil are linalool and linalyl acetate.
Medical Uses: The infusion of leaves is taken as a cooling medicine. Dried leaves and flowers tops are carminative and stimulant. It is believed to be the best remedy for headaches.
Medical uses in Iraq: for complaints of the digestive system- colic.

1- Prescription for the Treatment of Sand and Gravel in the Kidney:
Boil equal amounts of maidenhair (Krafs alber.), barley, maize, the patient drink this liquid several times a day.

2- Prescription for the Treatment of Itchy Skin (Allergic):
The patient with allergic skin can drink the liquid of boiling leaves of Shaterag many times a day.

3- Prescription for the Treatment of Heavy Bleeding in Women:
To stop heavy bleeding in women; be boiled the roots of tormentil (Ir k-alinjibar), the patient can then drink this liquid many times a day.

4- Prescription for the Treatment of Intestinal Colic:
The person who complained of intestinal colic, can drink the boiling of the tubers of Souchet round (saed),many times a day.

5- Prescription for the Treatment of Digestive Disorders (Indigestion, Gas, Colic):
Boil the following quantities in a liter of water:3-4 pieces of lime(Noomi-Basorah), a little of orange peel, 5 pieces of cardamom, one tablespoon of dried horse mint(Botnige), then add sugar to taste.

6- Prescription for the Treatment of Constipation:
Put a teaspoon of Senna (Sanna Makki) in a cup of medium size, and pour it boiling water, then leave 5 minutes and drink it four hours after aeting. Shows the effect after approximately 8 hours.

7- Prescription for Calming the Digestive System:
Put the seeds of Balangu in water, they immediately become coated with opaque, gray, tasteless mucilage, and then add sugar and cardamom. This drink used as cooling and sedative.

8- Prescription for the Treatment of Lower Back Pain:
Take a teaspoon of powdered root peel of Caper bush (Shefellah) and moistened with water, it becomes like the paste, then place and fix it on the affected vertebra.

The Second Axis:
In this part we will give some of the old prescriptions which are still in use throughout different areas of Iraq, because its use proved that they are safe and effective.
These prescriptions obtained mainly from our forefathers, where have been handed from one generation to another, also some of these prescriptions was obtained from the Iraqi heritage books.
Here are some old recipes entitled according to their therapeutic effect:
Results and discussion

The present work has presented 10 plants belonging to 9 different families which have been used and still in use as medicinal plants. Many of the population of Iraq depend largely on these traditional uses of medicinal plants. These uses need to be investigated pharmacologically to confirm the biological activities claimed for them. The identity and nomenclature of each plant was confirmed by consulting the older family members and friends who have knowledge of medicinal plants, and through the Iraqi heritage books concerned with medical treatment by the plants, as well as by asking some traditional healer in Baghdad, also by consulting the latest literature whenever it was possible. This work will have a continuity to provide other medicinal plants used in Iraq, with some recipes.

References