Sindh Univ.Res.Jour. (Sci. Ser.), Vol.: 36 (1) 1 - 4 (2004)

MEDICINAL STUDIES OF *FAGONIA* SP. IN KOHISTAN REGION (DISTT: DADU) SINDH

A. J. Pirzada and H. Abro

Department of Botany, University of Sindh, Jamshoro.

Abstract

Herbal drugs prepared from medicinal plants are used all over the world. This survey consists of medicinal uses of *Fagonia* in Kohistan Region. Two species *Fagonia cretica* L. and *Fagonia bruguieri* L. are very common in Sindh, both species possesses medicinal value. The plants are used for skin therapy, having cooling effect, rheumatism and liver trouble.

Keywords: Medicinal plants, Kohistan, Sindh

Introduction

Fagonia is a member of family zygophylaceae which is very common in Sindh comprises two species *F.cretica* L. *F.bruguieri* L. both possessed medicinal proporties.

Ancient history narrates the uses of plants for medicinal purposes. Man has been using the plants as the only source for treating the wounds and all other ailments, since the dawn of history or even before that (Kirtikar and Basu. 1935).

The evidence on record in literature shows that the study of plants dates back over 5,000 years to the Sumerians. The first known Chinese herb book dating from about 2700 B. C. to the Egyptians of 1000 B.C. are known to have used garlic, opium, castor oil, corriander, mint, indigo and other herbs for medicine, food and dyes. Ancient Greeks and Romans used plants for various purposes such as medicine symbols and magical charm, food seasoning, cosmetics, dyes, room scenters and floor coverings (Ahmed *et al* 1996).

The survey of medicinal plants and drugs of Pakistan specially the province of Sindh, has been done to some extent by Memon and Shahani (1988). Baquar (1989) compiled the medicinal and poisonous plants of Pakistan, whereas uses of medicinal plants of Angiospermic families were discribed by Sadaqat *et al.* (1996). But the Kohistan region of Sindh remained un-surveyed and a great deal still remains to be done for the drugs and medicinal plants of this region.

To study the medicinal plants of this remote and rocky area, the present work has been carried out on the herbal population of Kohistan, covering district Dadu, Sindh.

Material and Methods

The following sites of Kohistan area were selected for the collection of plants.

(1) Thano Bola Khan. (4) Sari

(2) Thano Ahmed Khan (5) Kerchat

(3) Dao Dam area. (6)Sindh University

The plants were dried and pressed for preservation. The samples were kept at the herbarium, Sindh University. The identification of the material used in this contribution was mode with the help of Flora of Pakistan by Nasir and Ali (1990) and Flora of Karachi by Jafri (1969). For the medicinal local usage, the Hakims and old wise men were contacted and their statements were recorded (Hakim Soomar,

Abdullah Burfat, Qamar Kohistani), Thano Bola Khan. The study was compared and correlated with literature "Indian medicinal plants" (Kirtikar and Basu 1935), "Medicinal and poisonous plants of Pakistan" (Baquar, 1989).

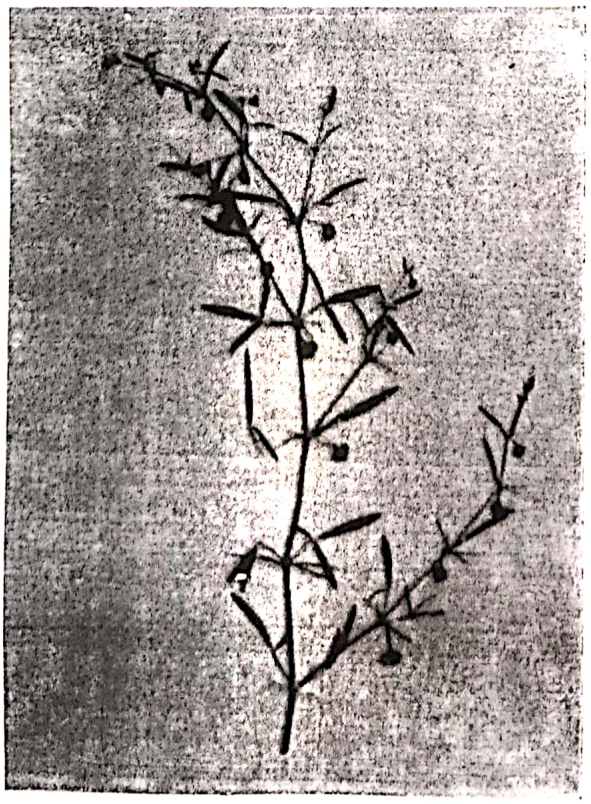
***Fagonia* L .**

Two species of zygophylaceae are widely distributed in Kohistan region. The plants are woody under shrubs with opposite to 3 foliate elliptical, lanceolate leaves and spiny stipules, flowers small s-merous on peduncles arising from between the spiny stipules. Filaments without scales, at base free, stamens 5 to 10, fruit capsular 5-cornered of 5 one seeded cocci.

Key to the Species:

i. Leaves compound's flowers pale rose
F. cretica L.

ii. Leaves simple flowers purple.
F. bruguieri L.



***Fagonia cretica* L .**

***Fagonia cretica* L .**

Family	:	Zygophylaceae
Local name	:	Dramaho
English name	:	Cretan Prickly
Soil type	:	Calcarious
Flowering Period	:	December

Taxonomic Characters:

Habitat:	:	Jamshoro,Thano Bola Khan
Habit	:	Herb or small shrub
Root	:	Tap Root
Stem	:	small, annual, green, spiny herb with solid branches.

Leaves: Compound, leaflets elliptical or linear short pointed stipules, spines longer than the leaflets.

Inflorescence : Racemose,

Flower: Small pale rose or purple, solitary stalked between the spines. Sepals 5 oblong, lanceolate half the length of the petals; petals 5; stamens, 10.

Fruit: Capsule velvety 5 angled, 5 celled; 2 seeds in each cell.

Medicinal properties

The plant is used for asthma, the bark in scabies, the leaves in fever, thirst and also for treatment of snake bite, dysentery, urinary discharges, liver trouble, tooth ache, bronchitis (Kirtikar & Basu. 1935).

Local Uses

Decoction of the plant is cure for irritation of skin and for rheumatism, (Hakim Soomar Abdullah).



***Fagonia bruguieri* L .**

***Fagonia bruguieri* L .**

Family	:	Zygophylaceae
Local name	:	Dramaho
English name	:	Cretan Prickly
Soil Type	:	Calcarious
Flowering Period	:	September

Taxonomic Characters

Habitat:	:	Thano bola Khan, Jamshoro, Sindh University.
Habit:	:	Small Shrub
Stem:	:	Suberect to prostrate upto 20cm tall .
Leaves:	:	Simple, bifoliate linear, lanceolate, short, pointed.
Inflorescence	:	Racemose
Flowers:	:	Small purple, solitary stalk
		Sepals 5, ovate 2.3 mm.long persistent, petals 5, spathulate, sp. 6mm, long 2.5 mm, broad.
Fruit:		Pedicelate, capsule 5 celld, 2 seeded in each cell.

Medicinal Properties:

Plant is considered as having cooling effect in indigenous medicine, it is used as bitter and astringent tonic. The juice of plant is separated to prevent suppuration when applied to open wounds (Kirtikar & Basu 1935).

Local Uses:

The paste of leaves of this plant is used for healing of open wounds and decoction of the plant is used for controlling the irritation of skin (Hakeem Soomar).

Results and discussion

The *Fagonia* sp. are the most commonly occurring medicinal plants of this area. *Fagonia cretica* L. is extensively used for its medicinal qualities for skin therapy cooling effect in indigenous medicine, to prevent suppuration when applied to open wounds (Baquar 1989).

Fagonia bruguieri L. is used for asthama, scabies, treatment of snake bite, liver trouble, bronchitis. The plant is used in Sindh and Afghanistan as a popular remedy for fever among the population of hilly

areas and it is given as a tonic, and febrifuge. In Peshawar valley it is given to children as prophylactic against small pox. In the Ormara hills, the plant is powdered and used as pultice upon the swellings of the neck and for Scrofula. (Kirtikar & Basu 1935, local hakeems, Qamar Kohistani).

It has been concluded that this study offers base line data to the pharmaceutical industry for further research and discover new medicinal compounds for the control of various diseases.

References

Baquar, S. R. (1989) Medicinal and poisonous plants of Pakistan, Printas, Karachi.

Ahmed, E., Abu Bkar and M. Ahmed, (1996) Toxin of 30 Arabian poisonous plants. College of Pharmacy Philadelphia University.

Jafri. S. M. (1969) Flora of Karachi. Printas Karachi.

Kirtikar, K. R., and B.D. Basu, (1935) Indian Medicinal plants vols i-vi, Lalit Mohan Basu, Alahabad, India.

Memon. M. I., and. N. M. Shahani. (1988) Survey and domestication of wild Medicinal plants of Sindh, Pakistan. Research repot; Pakistan agriculture research council Pakistan.

Nasir. E and S. I. Ali, (1990). Flora of Pakistan. Dept. Botany. Univ. Karachi.

Sadaqat H., A.W. Sabir and A. Ch. Tanweer, (1996) Medicinal Plants of Family Cucurbitaceae of Pakistan. Hamdard, **38**, (3): 91-101.