

ETHNO-BOTANICAL KNOWLEDGE TO CURE PILES AND FISTULA AS PRACTICED IN KAMRUP (RURAL) DISTRICT OF ASSAM

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ABSTRACT

A survey was conducted to collect information of ethno-medicine or plants used for treatment of piles and fistula by the people of 20 selected villages of Kamrup (Rural) district under Hajo and Kamalpur Block. From this survey it was found that 19 species of plants use as herbal remedies to treat piles and fistula on the basis of their ancestral knowledge and empiric experiences. The rural people still continue to depend on medicinal plants or on traditional herbal recipes. The wealth of traditional knowledge needs to be documented, preserved and studied scientifically for which there is tremendous demand globally. Such study may help to understand remedial plant metabolites and

implementation of this knowledge of ethno-medicine may lead to novel drug discovery for betterment of mankind.

KEYWORD: Ethno-medicine, piles, fistula, recipe, Kamrup (Rural).

INTRODUCTION

The traditional storage of ethno-botanical knowledge in memory and practice has a long history. The demand of traditional medicine is seen to be increased day by day which are the outcome of traditional knowledge. Local people prefer traditional medicine due to the fact that these medicines are more holistic, acceptable, accessible cost effective and proven to be safe.^[1] The World Health Organization has estimated that about 80% population in the developing countries depends directly on plants for medicines.^[2,3] The tribal's live and rely on plants and plant products and are using traditional medicinal system for centuries.

Assam is known for its rich flora and diverse forests and vegetation due to its unique topography, climate and altitude patterns.^[4] This region of India is also a homeland of people

belong to more than 100 ethnic tribes and sub tribes.^[5] All these tribes have their own traditional method of treatment based on herbal drugs. These medicines are practiced by the local people since generations with a notable degree of efficiency in preventing or in controlling different diseases.

Piles is one of the most common diseases in the world. Piles and fistula are amount to as high as all occupational diseases. Piles are swellings or swollen haemorrhoids which usually occur inside and around the anus, and along the anal canal. Haemorrhoids are masses, clumps, cushions of tissue full of blood vessels that support tissues, muscles and elastic fibres in the anal canal. Everyone has haemorrhoids but when the haemorrhoids guarding the anal passage become too big due to inflammation causes piles. Due to such inflammations the vein walls become stretched, thin, and irritated by passing bowel movements, that is when piles develops. A fistula is an unnatural connection between organs or blood vessels that is passageway of anus and blood vessels. In extreme cases besides unbearable pain bleeding also takes place. Piles and fistula is a very common health disorder of present day modern life style. It is seen that this severe anal disorder can often be controlled or cured by herbal treatments. Thus in this paper an attempt has been made to enumerate ethno botanical remedies to cure piles and fistula as practiced in Kamrup Rural, district of Assam.

MATERIALES AND METHOD

Kamrup(Rural) district is an administrative district in the state of Assam situated between 25°46' and 26°49' north latitude and between 90°48' east longitude. It is bounded by Udalguri and Baksa district in the north, Meghalayain the south, Darrang and Kamrup metropolitan in the east and Goalpara and Nalbari District in the west. It has total geographical area of 4,34,500 arces with two subdivision, 15 blocks which include 1068 villages. The total population of Kamrup (Rural) district is 15,17,202 with density 436/km². Present study was undertaken in 20 selected villages of Kamrup (Rural) district under Hajo and Kamalpur Block.

For documentation of ethno-botanical information and collection of plant material, several tours were undertaken during January 2017- September 2017. Data presented here is based on interview with traditional healers(known as bej, ojha or kabiraj, Hakims who generally prescribe and supply medicines to the patients). Sometimes data were also collected from common villagers like ploughman, fishman, cowboy, old aged man and women. The fresh herbal specimens were collected from the study area and were dried and made into herbarium

specimens by following the standard herbarium method.^[6] The identification of the dried specimens were done with the help of local floras and herbarium of Botanical Survey of India, Shillong as well as with GUBH herbarium of department of Botany(Gauhati University, Assam).

RESULTS

Information on 19 species of plants which are especially used in the treatment of piles and fistula as ethno-medicine by people of Kamrup (Rural) district distributed to 18 genera and 17 family. Among these the family Piperaceae as well as Nymphaeaceae include two species each. These are followed by the families like Rutaceae, Amaranthaceae, Nymphaeaceae, Verbenaceae, Agavaceae, Crassulaceae, Liliaceae, Malvaceae, Plumbaginaceae, Solanaceae, Combretaceae, Euphorbiaceae, Papilionaceae, Mimosaceae that represented one species each. Data obtained from this survey was compiled in 13 tables, which are commonly mentioned here as item1 to item 13. Under each recipe for each and every plant species botanical name, family, local name, part used and quantity are provided. Different plant parts like leaves, flowers, stems and other parts from specific species are used to cure piles in the traditionally rich study area.

Herbal recipe-I

Mode of preparation: 50 grams of stem bark of *Glycosmis arborea* grinded along with ten (10) fruits of *Piper nigrum* fruits of and ten(10) clusters of fruits of *Piper longum* to prepare a paste. Then the paste is mixed with 1 litre of water and allowed to boil to make the volume about half litre. Half (½) cup of this juice is prescribed for 10-12 days twice daily to the patient suffering from piles.

Herbal recipe-II

Mode of preparation: Leaf extract of *Desmodium triquetrum* L is mixed with fruit powder of *Embllica officinalis* and *Terminalia bellirica* with 50ml of honey or jaggery. The prepared item prescribed after meal is beneficial to get relieve from severe piles and fistula.

Herbal recipe-III

Mode of preparation: For preparation of this recipe two plant ingredients are necessary i.e. *Iresine herbstii* and *Nelumbo nucifera*. In this case one kilogram of leaves of *Iresine herbstii* is collected which is a very common medicinal plant often planted for its beautiful reddish habit. ½ kg dried flowers of *Nelumbo nucifera* is also an indispensable component in this

preparation. Here all the ingredients are boiled in 3 litres of filtered water where 25 grams of black salt is added. The mixture is allowed to boil till the volume reaches about 2 litres. Then it is allowed to pass through a sieve to get a clean uniform juice which is a very significant medicine that bears the capacity to cure piles. One cup of this juice is prescribed to take thrice daily before food continuously for three days.

Herbal recipe-IV

Mode of preparation: Whole amount of freshly prepared juice of one star fruit is advised to take for the treatment of piles to get relieve from bleeding anus.

Herbal recipe-V

Mode of preparation: The decoction from root or rhizome of Glory lily is mixed with 10 gm of ginger and given in a dose of three tea spoonful three times in a day for the treatment of piles.

Herbal recipe-VI

Mode of preparation: In the morning 20 ml juice prepared from roots of *Abutilon indicum* is advised to take. Sometimes instead of root 4-6 gm of seed powder along with jaggery is allowed to take to cure painful bleeding piles and fistula.

Herbal recipe-VII

Mode of preparation: Two to four gram seed powder of *Albizia lebbek* is mixed with fresh bark juice. The mixture thus prepared is prescribed to patients suffering from painful anus due to piles and fistula.

Herbal recipe-VIII

Mode of preparation: In this recipe four gram dried corm powder of a particular arum species(i. e. *Alocasia microrrhiza*) is mixed with a cup of milk. The patient is allowed to take the recipe prepared with milk is often allowed to take twice daily for 10 days continuously.

Herbal recipe IX

Mode of preparation: Powder from dried root stock ofis given twice a day during bleeding from anus until it cured fully.

Herbal recipe-X

Mode of preparation: 30 ml of plant juice for adults and 15ml for children is prescribed to take preferably in empty stomach. This is given once in the morning and once minimum half an hour before meal.

Herbal recipe-XI

Mode of preparation: Paste of dried root powder mixed with vinegar and applied externally in fistula developed anus.

Herbal recipe-XII

Mode of preparation: 45-50 grams of fresh leaves of *Clerodendrum viscosum* are crushed and filtered to get a green leaf extract. The extract or the leaf Juice is mixed with ½ glass of water and a pinch of salt. The liquid mixture is allowed to take orally at the rate of 1 cup thrice daily before lunch continuously for three days. If the disease is detected at very early stage then it is allowed to take at a rate of ½ cup only. The patients are advised not to take spicy food; rather they are suggested to consume boiled food only as far as possible.

Herbal recipe-XIII

Mode of preparation: This is very simple preparation where only two plant species are required that are above mentioned. Here 10gm of bark of *Cordyline terminalis* and *Kalanchoe pinnata* are crushed finely. The liquid extract allowed to take at the rate of 2 teaspoonfuls trice daily continuously for three days. Patients were reported to get rid from severe piles by consuming this herbal preparation.

Table 1: The Medicinal plants used in item 1 to cure piles in rural Kamrup.

Sl. No.	Local name	Scientific Name	Family	Parts used	Quantity
1	Chauldhua	<i>Glycosmis arborea</i> (Roxb.) DC., Syn. <i>G. pentaphylla</i> Corr.	Rutaceae	Bark	50gm
2	Pepoli	<i>Piper longum</i> L.	Piperaceae	Fruit	10 numbers
3	Jaluk	<i>Piper nigrum</i> L.	Piperaceae	Fruit	10 numbers

Table 2: The Medicinal plants used in item 2 to cure piles in rural Kamrup.

Sl. No.	Local name	Scientific Name	Family	Parts used	Quantity
1	Ulucha	<i>Desmodium triquetrum</i> L.	Papilionaceae	Leaf	5
2	Aamlokhi	<i>Emblica officinalis</i>	Euphorbiaceae	Fruit	2
3	Bhoira/ Bhomora	<i>Terminalia Bellirica</i>	Combretaceae	Fruit	2

Table 3: The Medicinal plants used in item 3 to cure piles in rural Kamrup.

Sl. No.	Local name	Scientific Name	Family	Parts used	Quantity
1	Bishohori	<i>Iresine herbstii</i> Hook.	Amaranthaceae	Leaf	1 kg(Fresh)
2	Podum	<i>Nelumbo nucifera</i> Gaertn	Nymphaeaceae	Dry flower	½ kg

Table 4: The Medicinal plants used in item 4 to cure piles in rural Kamrup.

Sl. No.	Local name	Scientific Name	Family	Parts used	Quantity
1	Kordoi	<i>Averrhoa carambola</i> L.	Oxalidaceae	Fruits	1 number

Table 5: The Medicinal plants used in item 5 to cure piles in rural Kamrup.

Sl. No.	Local name	Scientific Name	Family	Parts used	Quantity
1	Agnisikha or Ulat- sondal	<i>Gloriosa superba</i> L.	Liliaceae	Root and Rhizome	30gm
2	Zinger	<i>Zingiber officinalis</i>	Zingiberaceae	Rhizome	10 gm

Table 6: The Medicinal plants used in item 6 to cure piles in rural Kamrup.

Sl. No.	Local name	Scientific Name	Family	Parts used	Quantity
1	Japabandha	<i>Abutilon indicum</i>	Malvaceae	Root, seed	20 ml juice 4-6 gm seed powder

Table 7: The Medicinal plants used in item 7 to cure piles in rural Kamrup.

Sl. No.	Local name	Scientific Name	Family	Parts used	Quantity
1	Sirish	<i>Albizia lebeck</i>	Mimosaceae	Bark and seed	20-30 gm Seed 2-4 gm

Table 8: The Medicinal plants used in item 2 to cure piles in rural Kamrup.

Sl. No.	Local name	Scientific Name	Family	Parts used	Quantity
1	Mankachu	<i>Alocasia microrrhiza</i>		Tuber	4 gm

Table 9: The Medicinal plants used in item 9 to cure piles in rural Kamrup.

Sl. No.	Local name	Scientific Name	Family	Parts used	Quantity
1	Ranga bhet	<i>Nymphaea rubra</i> Roxb.	Nymphaeaceae	Root stock	10 gm

Table 10: The Medicinal plants used in item 10 to cure piles in rural Kamrup.

Sl. No.	Local name	Scientific Name	Family	Parts used	Quantity
1	Pokmou	<i>Solanum nigrum</i> L	Solanaceae	Whole plant	Single medium sized plant

Table 11: Medicinal plants used in item 11 to cure piles in Kamrup.

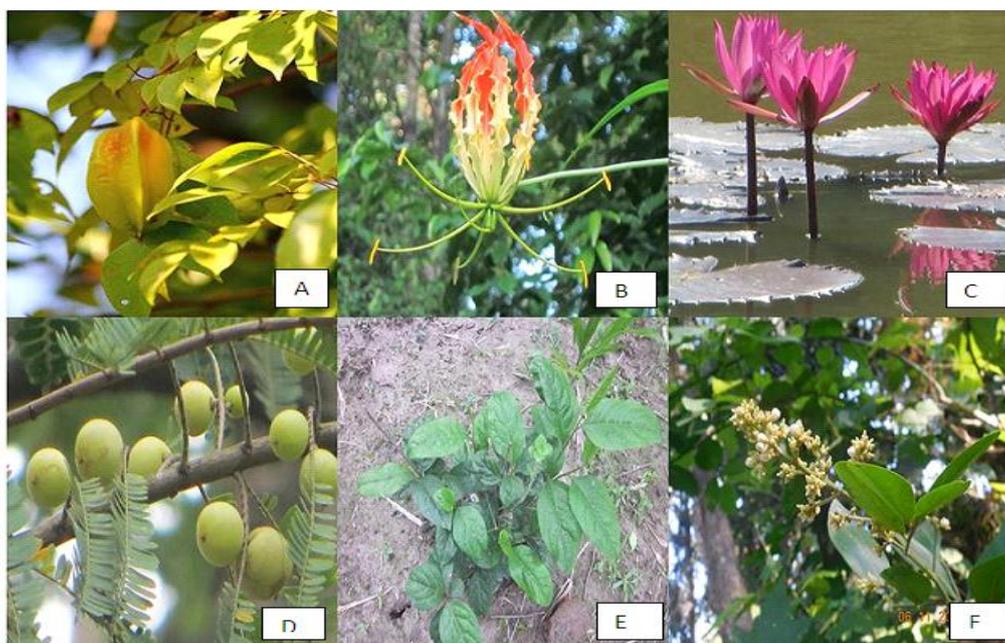
Sl. No.	Local name	Scientific Name	Family	Parts used	Quantity
1	Boga agyachit	<i>Plumbago zeylanica</i> L	Plumbaginaceae	Root	10gm

Table 12: The Medicinal plants used in item 12 to cure piles in rural Kamrup.

Sl. No.	Local name	Scientific Name	Family	Parts used	Quantity
1	Vetmali	<i>Clerodendrum viscosum</i>	Verbanaceae	Leaf	40-45gm

Table 13: The Medicinal plants used in item 13 to cure piles in Kamrup(Rural).

Sl. No.	Local name	Scientific Name	Family	Parts used	Quantity
1	Pategoja	<i>Kalanchoe pinnata</i>	Crassulaceae	Leaf	2 number
2	Horisankar	<i>Cordyline terminalis</i>	Agavaceae	Stem bark	10gm

**Fig-A:-Averrhoa carambola L., B-Gloriosa superba L., C-Nelumbo nucifera Gaertn D-Emblica officinalis, E- Plumbago zeylanica L., F-Glycosmis arborea (Roxb.) DC.**

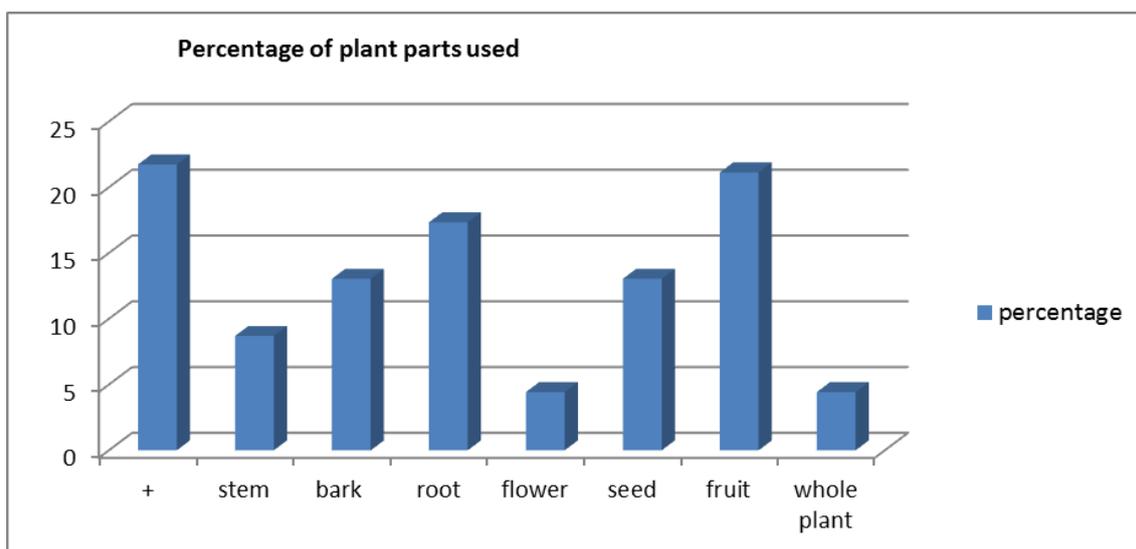


Fig. 1: Distribution of medicinal plants parts used in the treatment of Hemorrhoids or Piles.

DISCUSSION

From the study it is seen that most villages of Hajo and Kamalpur block of Kamrup (Rural) districts are still practicing local health tradition to cure various diseases. The scope for analysis, research, modifications and refinements in the secrecy maintained family based occupation are very limited. Such secrecy restricts the growth of Indian Medicinal system. Apart from absence of sustained research and development as well as due to gradual erosion of traditional knowledge have contributed a lot to the decline of age long traditional herbal health care practices.

To conserve and protect traditional knowledge, there is need to create awareness among the young generation. Practices of traditional knowledge are very useful and very easy to follow up and having little or mostly no side effect if necessary scope of modification regarding preparation and other aspects should also be given importance. Such study may help to understand remedial plant metabolites and implementation of this knowledge of ethno-medicine may lead to novel drug discovery for betterment of mankind.

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