

Ethnomedicinal Plants used against Gastrointestinal problem in Gingee Hills of Villupuram District, Tamil Nadu

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ARTICLE INFO

Article history:

Received on: 04/10/2012

Revised on: 18/10/2012

Accepted on: 23/10/2012

Available online: 29/10/2012

Key words:

Community knowledge,
Ethnobotany, Gingee hills,
Gastro intestinal problems.

ABSTRACT

This study is a documentation of medicinal plants used for gastro intestinal problem by villagers around Gingee hills of Villupuram District. A total of 28 Dicot plants belong to 24 families are used to cure gastrointestinal problem. Isolation of active principles and anti-microbial activity should be studied on these medicinally plants. Emphasis also made for proper documentation and conservation of these medicinal plants.

INTRODUCTION

Life on Earth mainly depends on plants and it is very important for survival of human beings. Plant and plant products are used by human beings from time immemorial. But very few people realize the importance of plants and it is also a part of our environment. The use of plants as medicine is widespread throughout the world because of increase in the side effects caused by synthetic drugs. Nearly 80% of world population depends on herbal medicines for primary healthcare (Kamboj 2000). The Indian Materia Medica includes 2000 drugs are plant base, which are derived from different Indigenous knowledge and folklore practices (Narayana et al 1998). The tribal and rural people mainly depend on medicinal plants for curing various ailments. Just like allopathic medicine system, the traditional system uses various combinations of plants to cure diseases. Several workers reported uses of plants to cure various ailments by rural and tribal people inhabiting various regions of Tamil Nadu (Eluvakkal 1991; Alagesabopathi et al 1999; Sankarasivaraman 2000; Ganesan et al., 2003; Muthukumarasamy

et al., 2003a; 2003b; Rajendran et al., 2003; Ignacimuthu et al., 2006; Ayyanar et al., 2008; Kottaimuthu 2008; Shanmugam et al., 2011.) The present study was carried out to document ethno medicinal plants to cure gastrointestinal problems like dysentery, diarrhoea, constipation, piles, stomach ache and Indigestion.

MATERIALS AND METHODS

Tamil Nadu is situated in Southern end of India, east of Kerala, South of Andhra Pradesh and Karnataka States. The study area of investigation is pakkamalai hill one of the hill range of gingee hills, which is located in villupuram district, Tamil Nadu. There are about 14 villages present around the hill. The study area was surveyed randomly in villages surrounding the hill with the prime objective of gathering information about community knowledge used to treat gastro intestinal problems. The villagers use these plant sources either for self – medication or for treating others. Ethno botanical data were collected according to the methodology suggested by (Jain et al., 1995). A standard questionnaire was used to collect data, which includes local name of the plants, plant part used, mode of administration.

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The collected plant species were identified using The Flora of Presidency of Madras (Gamble, 1956) and The Flora of Tamil Nadu Carnatic (Matthew, 1983) and Plant Resources of Tiruvannamalai District (Vijaysankar et al., 2012).

RESULTS

28 species of plants were used to cure gastrointestinal problems like stomach ache, Indigestion, Constipation, Dysentery, Piles and Diarrhoea. These plants are belonging to 22 Dicot families. Plants are arranged alphabetically with their family name, local name (Tamil), parts used, gastro-intestinal problem and mode of administration in the following Table 1:

DISCUSSION

Different plant parts were used as medicine to treat against gastro intestinal problem. Among the different plant parts Leaves were most frequently used (18 plant species) followed by bark, stem, root, seeds and tuber. Gastro – intestinal problems like dysentery 11 plant species were used; for indigestion 6 plant species stomach ache 5 plant species, diarrhoea 3 plant species, constipation 2 plant species, piles 2 plant species were

used. The study shows that among various gastrointestinal problems dysentery is the major ailments this may be because of unhygienic food habits. *Sauropus bacciformis* & *Morinda pubescens* leaves are exclusively used to cure indigestion and dysentery for children. *Vicoa indica* leaves are used to cure both indigestion and dysentery and the mode of administration is same for both ailments.

CONCLUSION

Active compounds extracted from these plants may leads for pharmacological and biochemical investigations, which may leads to discovery of novel drug.

Therefore, pharmacological values of these plants should be tested. Moreover, over exploitation of plants in the name of medicine will sometimes leads to extinction of some plant species. So proper monitoring and conservation is very much needed.

ACKNOWLEDGMENT

The authors are thankful to all resource persons who shared their invaluable community knowledge on plants during the study.

Table. 1: Ethnomedicinal plants used for the treatment of Gastro- intestinal problems.

Sl. No.	Botanical Name, Family and Local Name	Parts Used	Gastro-intestinal Problems.	Mode of administration
1.	<i>Abutilon indicum</i> (L.) Sweet. Malvaceae; Ven Thuthi	Leaves	Stomach ache	Leaves ground with garlic, pepper and eat , drink glass of water to stop stomach ache
2.	<i>Achyranthes aspera</i> L. Amaranthaceae; Nayuruvei	Leaves	Piles	The leaf paste is mixed with butter milk and taken internally for 5 days.
3.	<i>Argemone mexicana</i> L. Papavaraceae; Bramathandu	Seeds	Constipation	Seeds are powdered and mix with water taken orally for 2 days.
4.	<i>Bacopa monnieri</i> (L.) Pennell Scrophulariaceae; Neerbhrami	Leaves	Dysentery	Leaf is crushed and mixes with water, taken orally for 2 days.
5.	<i>Cadaba fruticosa</i> (L.) Druce Capparaceae; Vedhi chedi	Leaves	Dysentery	Leaves crushed and mixed with lime juice taken orally 2 times a day.
6.	<i>Cardiospermum halicacabum</i> L. Sapindaceae; Mudakathan	Leaves	Dysentery	Leaf juice mixed with lime taken in empty stomach
7.	<i>Cassia tora</i> L. Caesalpiniaceae; Thoi kanne	Leaves	Dysentery	Leaf is boiled in water and the decoction is taken orally for 3 days.
8.	<i>quadragularis</i> L. Perandai	Stem	Indigestion	Stem is made into chutney along with ginger, pepper and taken.
9.	<i>Cocculus hirsutus</i> (L.) Diels Menispermaceae; Chirukattukodi	Leaves	Dysentery	Leaves boiled in water and the decoction is taken orally for 2 days.
10.	<i>Commiphora caudata</i> (Wight & Arn.) Engler Burseraceae; Pachaikiluvai	Leaves	Stomach ache	Leaves are crushed and mix with lime juice 2 times a day for 2 days.
11.	<i>Digera muricata</i> (L.) Mart Beitr Amaranthaceae; Thuralikeerai	Leaves	Stomach ache	Leaves cooked and eaten.
12.	<i>Diospyros montana</i> Roxb. Ebenaceae; Karumalemaram	Bark	Dysentery	Bark is crushed and mixed with buttermilk administer orally.
13.	<i>Ficus benghalensis</i> L. Moraceae; Aalamaram	Bark	Diarrhoea	Stem bark is boiled in water the decoction is mixed with butter milk drink twice a day for 2 days to cure diarrhoea.
14.	<i>Gardnia gummifera</i> L. Rubiaceae, Pavettan	Bark	Indigestion	Bark is mixed with <i>Cardiospermum halicacabum</i> leaves, <i>Derris scandens</i> leaves, <i>Albizia amara</i> leaves, dried and made into powder mix with hot water and drink.
15.	<i>Hybanthes ennaespermus</i> (L.) F. Violaceae; Orilaitthamarai	Leaves	Constipation	Leaf is powdered and mixed with water the decoction is administer orally.
16.	<i>Lannea coromandelica</i> (Houtt.) Merr. Anacardiaceae; Uthiyam	Bark	Diarrhoea	Bark is powdered and mixed with <i>cocinia grandis</i> leaves, <i>Allium cepa</i> made into chutney and eat.
17.	<i>Morinda pubescens</i> J.E. Smith Rubiaceae; Nuna	Leaves	Dysentery	Leaf is boiled in water and the decoction is administered to children for 2 days.
18.	<i>Nelumbo nucifera</i> Gaertn. Nelumbaceae; Thamarai	Tuber	Dysentery	Tuber is eaten raw.

19.	<i>Ocimum tenuiflorum</i> L. Lamiaceae; Thulasi	Leaves	Indigestion	Leaves are powdered and mix with water and drink.
20.	<i>Pergularia daemia</i> (Forssk.) Chiov. Asclepiadaceae; Uthamani kodi	Root	Stomach ache	Roots ground with turmeric, <i>piper nigrum</i> made into paste taken orally.
21.	<i>Phyla nodiflora</i> (L.) Greeme Verbenaceae; Poduthalai	Leaves	Piles	Leaves are made into chutney and eaten to cure irritation of piles.
22.	<i>Phyllanthus reticulatus</i> Poir. Euphorbiaceae; Palukuchithazai	Leaves	Dysentery	Leaf is made into paste and given 2 times a day.
23.	<i>Sauropus bacciformis</i> (L.) Airy Shaw Euphorbiaceae; Manthanpooundu	Leaves	Indigestion	Leaves are ground with piper betel and administer orally to children for 2 days.
24.	<i>Scutia myrtina</i> (Burm. f.) Krurz Rhamnaceae; Sudali	Leaves	Indigestion	Leaves are cooked and eaten
25.	<i>Spondias pinnata</i> (L.f.) Kurz. Anacardiaceae; Mavilam	Bark	Stomach ache	Bark is powdered and boiled in water the decoction is taken orally.
26.	<i>Toddalia asiatica</i> (L.) Lam. Rutaceae; Milagarana	Leaves	Dysentery	Leaf is crushed and mixes with lime and drink.
27.	<i>Vicoa indica</i> (L.) DC Asteraceae; Jimikkippoo	Leaves	Indigestion and Dysentery	Leaf is boiled in water and the decoction is administered orally.
28.	<i>Ximenia americana</i> L. Olaceae; Kanupaalai	Bark	Diarrhoea	Bark is ground with turmeric made into paste and mildly heated administered orally

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Vijayasankar, R., Ravi Kumar K., Ravichandran.P., Plant Resources of Tiruvannamalai District, Tamil Nadu, India.(2012)

How to cite this article:

R. Muralidharan and D. Narasimhan. Ethnomedicinal Plants used against Gastrointestinal problem in Gingee Hills of Villupuram District, Tamil Nadu. J App Pharm Sci. 2012; 2 (10): 123-125.