



Plants used as traditional medicine by the Nicobari tribes of Andaman & Nicobar Islands

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Abstract: Nicobari Tribals are using a term “Kach roy chon” for local Folk Healers who is certified by the father of Church to give Ethno medicines. Ethno botanical study on folk medicinal plants was conducted at Tamaloo, Perk (Car-Nicobar), and Harmander Bay (Little Andaman) on 2007-08. The study was focused on identifying plants and their uses, part of the plants used as medicine, method, dose, duration, route of administration etc. Total 22 medicinal plants species were collected and identified through the folk healers for treating various human ailments like Fever (*Jwar, Nicobari Term-Vui*), Cough (*Kas, N. - Ebbh*), Asthma (*Swas, N.Huba noma*), Abdominal pain (*Udersbul, N.Chak allon*), skin diseases (*Twak rog, N.Keetug*), Joint pain (*Sandhisbul, N.Chaktaare*), Fracture (*Asthibhagna N. Oh kaalran*), Hypertension (*Uchcha Raktachap. N. Puchen maabaam*) Burning micturition (*Mutrajalan, N. Chak haakan*) etc. The most dominant part of the plant was leaf as medicine, route of administration was oral and method of preparation was grinding.

Keywords: Traditional knowledge; Kach roy chon; Ailments; Nicobari Tribal; Medicinal Plants.

INTRODUCTION

Ethno medicine is a study or comparison of the traditional medicine practiced by various ethnic groups, and especially by indigenous peoples. The word ethno medicine is sometimes used as a synonym for traditional medicine (Wikipedia). Plants have been used as source of medicine throughout the world for many years ago and still continue to occupy an important place in traditional as well as modern systems of medicine.

Traditional knowledge of medicinal plants and their use by the indigenous healers and drug development in the present are not only useful for conservation of cultural tradition and biodiversity but also for community health care and drug development in the local people. The indigenous knowledge on medicinal plants appears when humans started and learned how to use the traditional knowledge on medicinal plants¹.

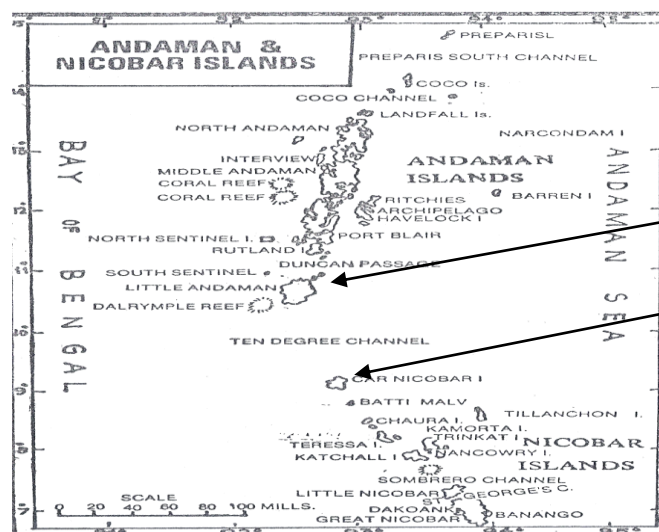
Interestingly, the traditional system of medicine using plants as a source have acquired greater impetus in the last three decades as excessive use of synthetic drugs and antibiotics have been found to cause number of side effects². Therefore, the investigation on the medicinal plants is increasing progressively all over the world and more stress is being placed on herbal drugs.

It is the urgent need to exploit the available knowledge with tribal people for the other people. The plants, which are thought to be wild and obnoxious weeds, tribal people use them as a source of medicine. The present study was undertaken with that view.

The Nicobari tribe resides in the Nicobar district of Andaman and Nicobar Islands. The area is covered with natural evergreen type of vegetation. The climate of the A & N Islands is the equatorial hot tropical humid climate with high but uneven distribution of rainfall throughout the year caused by both the southwest & northeast monsoons from May to December. These tribals depend on surrounding forests, Sea sources for needs like shelter, food, medicine etc.³⁻⁴.

There are about 250 medicinal plants reported from these Islands and 80 are having potential for commercial exploitation⁵. The Andaman and Nicobar Island is an abode of five primitive tribes, viz. Jarawas, Onges, Nicobarese, Shompens and the Sentinelese. Of these, only Nicobarese are able to maintain their sustenance under the influence of outsiders. They have been living in harmony with the nature since ages and depend on plants for the treatment of various ailments⁶. However, with the present pace of shrinking of the forest and rich traditional heritage under the influence of outside world, these tribes are losing the knowledge of medicinal plants, which can otherwise be tapped for the betterment of the society⁷.

The present work deals with the systematic survey and reporting of medicinal potential of some plants from tribal area of Andaman & Nicobar Islands. The reports made in this paper are totally based on interviews with tribal people who are considered as “Medicine man” in Nicobari term “Kach roy chon”. The plants enumerated in this paper are still under use by the tribals as for external and/or internal administration.



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MATERIALS AND METHODS

A medicinal plant survey has been conducted to the selected localities e.g. Tamaloo, Perk (Car-Nicobar), and Harmander Bay (Little Andaman) and folk medicine

specimens were collected. The local names and their medicinal uses were recorded with the help of some traditional herbal collectors, local vaidyas (N.T.-Kach roy chon) and Ayurvedic medical practitioners.

Table 1: Plants used as Traditional Medicine by the Nicobari Tribes of Andaman & Nicobar Islands

S.No.	Local name of Medicinal Plants	Latin name	Family	Part used	Disease Indications in common and Nicobari Terms	Mode of preparation/ Uses	Dose & Duration
1.	Banaraabaa	<i>Jusonimuon sp.</i>	Oleaceae	Leaf	Fever (Vui) and Body ache (Chak uala)	Prepared decoction (Kwath) of the leaves boiled with 4 part of water.	50-100 ml once a day
2.	Chaahi (Kamroop)	<i>Ficus microcarpa L.f.</i>	Moraceae	Stem & leaf	Fracture (Oh kaalran) and Joint pain (Chaktaare)	Prepared oil with some other drugs and Applied externally then covered with clothes 1. Internal use of Fuk leaf juice with sweet Toddy (Type of alcohol made by sap of coconut tree) 2. External use as lepa of Fuk's leaf with ash of apical part of immature banana and hen's feather	Once a day for 1 month
3.	Fuk	<i>Sterculia rubiginosa Vent.</i>	Sterculiaceae	Leaf	Fever (Vui)		2-5 ml twice a day for 3-5 days
4.	Inyaang (Sultan Champa)	<i>Calophyllum inophyllum L.</i>	Clusiaceae	Leaf	Pain in the eye (Chak Maad) and Stye (Shahmat)	Eye wash by the leaves juice and water	Twice a day for 5-7 days
5.	Katahul (Datura)	<i>Datura metel L.</i>	Solanaceae	Leaf	Swas (Huhaa noma)	leaves juice with Brandy (type of alcohol)	small dose (1-2 drop) once a day
6.	Kinrool (Goalpathi)	<i>Macaranga tanarius (L.) Muell.</i>	Euphorbiaceae	Leaf	Indigestion and Abdominal pain (Chak allon)	Prepared Juice of the leaves	5-10 ml twice a day
7.	Kupaalaal	<i>Cassia alata L.</i>	Caesalpinaceae	Leaf	Ringworm (Keetuh)	Fresh and clean leaves rubbed on the ringworm Prepared oil with some other drugs and Applied externally then covered with wood of betel nut and clothes	2-3 times a day till cure
8.	Lurong (Noni)	<i>Morinda citrifolia L.</i>	Rubiaceae	Leaf, Root and Fruit	Fracture (Oh Kaalran)		Once a day for 1 month/till cure
9.	Mahaarouan (Kasmard)	<i>Cassia sophera L.</i>	Caesalpinaceae	Leaf	Hypertension (Puchen Maahaam) and Giddiness (Chavilong almaat)	Prepared Juice of the leaves	5-10 ml once or twice a day for 3-5 days
10.	Milaano (Gandhali)	<i>Paederia foetida L.</i>	Rubiaceae	Leaf	Fracture (Oh Kaalran)	Prepared oil with some other drugs and Applied externally then covered with wood of betel nut and clothes	Once a day for 1 month/till cure
11.	Saanuk (Jungli neem)	<i>Ganophyllum falcatum Blume</i>	Sapindaceae	Leaf	Abdominal Pain (Chak allon)	Prepared Juice of the leaves	5-10 ml twice a day for 3 days
12.	Samaak leh (Erand)	<i>Ricinus communis L.</i>	Euphorbiaceae	Leaf	Burning Micturition (Chak haakan)	Prepared Juice of the leaves	5-10 ml once a day
13.	Singero	<i>Claoxylon indicum (Reinn, ex Blume)</i>	Euphorbiaceae	Leaf	Eye injury (Faar dare) and Cough (Ehh)	1. Drop of leaves juice instilled in the eye. 2. Prepared Juice of the leaves for the treatment of Cough	1. 2-3 times a day externally 2. 5-10 ml twice a day
14.	Taachuroi	<i>Ranvolfia sumatrana Jack</i>	Apocynaceae	Leaf	Injury (Faar dare)	Prepared Paste (Kalk) and applied externally	Once a day for 5-7 days
15.	Taahem	<i>Ficus tinctoria G.forst.</i>	Moraceae	Stem & Leaf	Fracture (Oh kaalran) and Joint pain (Chaktaare)	Prepared oil with some other drugs and Applied externally then covered with clothes	Once a day for 1 month
16.	Taamap (Fern)	<i>Pyrossia lanceolata (L.) Fern</i>	Polypodiaceae	Stem & Leaf	Fracture (Oh kaalran) and Joint pain (Chaktaare)	Prepared oil with some other drugs and Applied externally then covered with clothes	Once a day for 1 month
17.	Telemaah (Anar)	<i>Punica granatum L.</i>	Punicaceae	Leaf	Chest pain (Chak alnoh)	Prepared Juice of the leaves	5-10 ml twice a day for 3-5 days
18.	Tohokoron (Kapas)	<i>Gossypium herbecum L.</i>	Malvaceae	Leaf	Burning Micturition (Chak haakan)	Prepared leaf juice with Ricinus communis	5-10 ml twice a day
19.	Tokurotong (Koraiya)	<i>Tabernaemontana crispa Roxb.</i>	Apocynaceae	Leaf	Injury (Faar dare)	Prepared paste (Kalk) and applied externally	Once a day for 5-7 days
20.	Tosamu	<i>Sterculia parviflora Roxb.</i>	Sterculiaceae	Leaf	Injury (Faar dare)	Prepared paste (Kalk) and applied externally	Once a day for 5-7 days
21.	Tosarong tumrit (Sahdevi)	<i>Cyanthium cinereum (L.) H. Rob.</i>	Asteraceae	Leaf	Pain in the Eye (Chak Maad)	Drop of leaves juice instilled in the eye.	2-3 times a day externally
22.	Tumaah (Arloo)	<i>Oroxylum indicum Vent.</i>	Bignoniaceae	Leaf	Injury (Faar dare)	Prepared paste (Kalk) and applied externally	Once a day for 5-7 days

The collected specimens were identified with the help of some available standard floras and Botanical survey of India, Port Blair. Folk claims were checked and crosschecked with the people of different localities in the tribal pocket. The Plant species enumerated are arranged alphabetically. The following criteria were adopted to analyze each specimen.

1. Latin name and family of the plant.
2. Local vernacular name and common Hindi.
3. Part used
4. Disease indications in common and Nicobari terms.
5. Mode of preparation/uses
6. Dose and duration.

DISCUSSION

The Nicobari tribes are residing in Nicobar District especially in Car- Nicobar. Most of them having knowledge of Medicinal plants and its applications shared the information with us except a few who were found reluctant. Nicobari Folk Vaidya means 'Kach roy chon' is certified by the father of Church to give herbal treatment.

As indicated from the above table a total of 22 medicinal plant species were collected and identified by the Botanical Survey of India, Port Blair (A & N Islands). Those 22 medicinal plant species were treated around 17 different ailments. Some of the medicinal plants were added different ingredients but around 80% of the plants were not adding any ingredient to treat human ailments. Above table indicated that 8 species (36.36%) of the medicinal plants were taking by oral, 12 species (54.54%) of medicinal plants were taking by dermal and the rest 2 species (9.09%) of medicinal plants also taking both by oral and dermal mode of application. So this finding showed that the highest mode of administration of these medicinal plants were dermal. Above table also indicated that highest part of the medicinal plant species used to treat human ailments was leaf. Such wide harvesting of leaves for traditional medicine compared to roots which are important for survival of plants has a less negative influence on the survival and continuity of useful medicinal plants and hence does not affect sustainable utilization of the plants.

CONCLUSION

Thus, the observations of present study showed that traditional medicine plays a significant role in tribal communities of Nicobar Islands as well as various tribal communities of rest of the World. From ancient time, they have well developed their own pharmacopoeia (Traditional system of therapy). So this study will be helpful for

researcher and pharmaceutical industries to find out the other uses of plant which will be helpful to all health care system of India.

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