

Traditional healthcare practices among the *Tagin* tribe of Arunachal Pradesh

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The *Tagin* tribe is an indigenous group of people living at upper Subansiri district of Arunachal Pradesh. A study on practice of Traditional Medicine (TM) was carried out among these people. The result documented 10 medicinal plants used by the Traditional Medicinal Practitioner (TMS) of *Tagin* tribe for use in traditional medicine. Fresh leaves, fruits, bark and stems are reported be used in TM for treatment of ailments like diarrhoea, jaundice, wound healing, fever, etc.

Keywords: *Tagin* tribe, Upper Subansiri, Traditional medicine, Arunachal Pradesh

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Arunachal Pradesh is one of the North eastern provinces of India bordering Tibet, Bhutan, China and Myanmar. It is situated on the Great Eastern Himalayan Mountain range and recognized as one of the Mega Biodiversity hot spots of the world¹. More than 25 different group of tribal population are living in this hill state from time immemorial. Each of the tribes has a unique tradition of culture and lifestyle occupying different geographical regions². *Tagin* is one of such indigenous group of people inhabited in the bank of Subansiri river of Arunachal Pradesh. *Tagin*, which refers to as a member of larger designation of *Tani* tribes are concentrated in Daparijo of upper Subansiri district and also found sparsely distributed in adjoining West Siang district of Arunachal Pradesh. The Upper Subansiri district provides shelters to some other tribes like *Hill Miri* and *Gallo*. The district lies in the central part of the state in between 28.5 degree and 28.25 degree latitude and 93.15° and 94.20° longitudes covering a geographical area of 7,032 Sq km. The area consists of chains of rugged hills and mountains, the altitude of which varies from 1,524-2,835 m. The high mountain region of the northern boundary of the district is extremely cold and large tracts remain covered with snows almost throughout the year. The plain areas in foothills are intersected by innumerable fast flowing rivers and water courses and covered by dense forests. Dense forest area of the district

harnesses the rich bio resource of both flora and fauna.

The *Tagin* people are of Mongoloid origin, who migrated from Tibet in different times and settled in their present home land of Subansiri valley³⁻⁴. As early as 1971, about 20,000 claimed to be of *Tagin* ethnicity⁵. People living in this area lead a rural life and dependent mostly on the forest resources available in their surroundings. The *Tagin* tribe of Arunachal Pradesh has been practicing the use of medicinal plants available in local forests for curing common illness. Utilization of this traditional knowledge of medicinal plants is not only useful for conservation of cultural traditions and biodiversity but also for community healthcare and drug development⁶. Therefore, documentation of this traditional knowledge is inevitable to throw light into the field of herbal research and to improve socio-economic development of the people. The work is based on the indigenous knowledge on medicinal plants and methods of treatment against common ailments prevails among the *Tagin* tribe of Arunachal Pradesh.

Methodology

A survey was carried out to collect first hand information on the traditional medicinal practice by the *Tagin* people. Thirteen villages inhabited by the *Tagin* people in and around Daparijo were survey in a time span of 13 months during August 2006-September 2007. The villages covered during the

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study were, Yekar, Dulom, Sippi, Soki, Mosi, Duni, Sikam, Lamdik, Radding, Kamara, Maling, and Nayam. Ethnomedicinal data were collected following standard methods⁷⁻⁸. Personal interviews with villagers, group discussion and assistance of local information were used for data collection. A total of 50 local informants belonging to the age group of 41-66 yrs were interviewed during the survey. Amongst the informants, 9 were Traditional Medicine Practitioner (TMP) in different villages. For data collection, semi structured questionnaire with flexibility of question was prepared to collect all possible information on Traditional Medicine (TM) preparation, application and associated social belief prevailed among the *Tagin* TMPs. It was observed that very often, practice of TM is associated with their culture, worship of deities and superstitions. Plants used by the TMPs and the local informants for the TM preparations were identified. At the same time, mode of TM preparation, part used and its application was recorded. Many of the TMPs neither understand nor speak language other than their *Tagin* dialect. Therefore, local *Tagin* people having knowledge on English were involved as interpreter during the data collection. Plants were collected and preserved in the form of herbarium for identification. Identification of the plant species was made using various taxonomic keys, books and monographs⁹⁻¹⁰.

Results and discussion

The *Tagin* people of Arunachal Pradesh are an indigenous group of people living as native of Upper Subansiri district. The *Tagin* ethnicity comprise of 39,000 individuals scattered in different pockets of upper Subansiri and adjacent districts¹¹. The study among the *Tagin* people revealed practice of an age old tradition of herbal medicine for cure and prevention of diseases/ ailments. A total of 10 medicinal plants used for TM preparation were recorded amongst the *Tagin* people. All the medicinal plants recorded are used in human healthcare as well as for animal disease. Freshly collected leaves are the major components of their TM preparation. While some of this indigenous preparation is used for topical application for wound healing, burn injuries, skin diseases etc, others are used for oral administration for health problems like stomach disorder, diarrhea, joints pain, blood clotting, fever, tonsillitis, blood pressures, gastritis and jaundice (Table 1). *Tagin* peoples of Arunachal Pradesh still conserved their indigenous knowledge on traditional medicine and its

practice. Due to lack of adequate communication, remoteness of the villages and unavailability of modern health care facilities the local people use traditional medicine for their common ailments. This traditional knowledge system among the tribes is a complete system of theory and practice that have been evolved through ages of human experiences and independent of conventional biomedicine. Similar to the *Tagin* tribe, practice of herbal medicine among other tribes Arunachal Pradesh like *Apatani*, *Adi*, *Monpas*, etc. have been reported¹²⁻¹⁵.

The Convention of Biological Diversity (CBD) has put much emphasis on conservation of this indigenous knowledge invariably in different parts of the world¹⁶⁻¹⁷. India has a great history of ancient medical systems such as Ayurveda and other similar repositories of knowledge, which represent valuable resource of medicinal plants¹⁸. The study shall help the indigenous *Tagin* people of Arunachal Pradesh in getting necessary attention from the world communities for conservation of these TM. Practice of herbal medicine for curing various ailments has been reported from other countries of the world. Several such medicinal plant species has been reported to use for fertility control by the people of Trinidad and Tobago and Vietnam for treatment of

Table 1—List of plants used by *Tagin* tribe of Arunachal Pradesh for preparation of Traditional Medicine

Plant name	Family	Local name	Parts used	Uses
<i>Ageratum conizoid</i> L.	Asteraceae	<i>Eh gaar</i>	Fresh leaves	Wounds healing, blood clotting
<i>Bryophyllum calycinum</i> Salisb.	Crassulaceae	<i>Eh yadap</i>	Fresh leaves	Jaundice
<i>Clerodendrum serratum</i> (L.) Moonb	Lamiaceae	<i>Tapin</i>	Fresh tender leaves	Gastritis Blood pressure
<i>Embellia ribes</i> Burm. (f)	Myrsinaceae	<i>Onior</i>	Leaves, fruits	Diarrhoea
<i>Ficus hispida</i> (Blanco)	Moraceae	<i>Cheyum</i>	Sap of stem	Burn injury
<i>Gynocardia odorata</i> (R. Br.)	Achariaceae	<i>Tiku</i>	Leaves	Tooth decay
<i>Pederia foetida</i> L.	Rubiaceae	<i>Uppe tire</i>	Leaves	Gastritis
<i>Piper longum</i> L.	Piperaceae	<i>Satu rikki</i>	Leaves, stem	Joints pain, arthritis
<i>Piper nigrum</i> L.	Piperaceae	<i>Rari</i>	Leaves, fruits	Fever, tonsillitis
<i>Tinospora cordifolia</i> (Miers) eae	Manisprmac	<i>Sayen kiji</i>	Leaves	Scabies/other skin disease

ailments like influenza, cough, malaria, dysentery, and helminthes parasites^{19,20}.

Some of the plants used by *Tagin* people for TM preparation are also used by some other tribal population of Northeastern states as well as some other parts of India. The use of *Paedaria foetida* L. for stomach disorder by the *Tagin* people is also reported from the *Apatani* tribe of Arunachal Pradesh²¹. The leaves of *Ageratum conizoid* L. and *Bryophyllum calycinum* Salisb are used by the *Jaintia* tribes of north Cachar hills district of Assam for burn injury and wounds²². The medicinal value of *Piper nigrum* (L) was reported from the Madurai district of Tamil Nadu²³. Similarly, the *Tinospora cordifolia* used for curing scabies by the *Tagin* tribe of Arunachal Pradesh is used for treating wound healing in Kancheepuram district of Tamil Nadu²⁴. The linkage of use of similar plants by different group of people across India remains to be investigated. Whatever may be the reason, the information suggests that the epistemology of the TM used by these tribal people needs to be reviewed by the epistemology of scientific knowledge. Use of *Embelia ribes* Burm by the *Tagin* people for stomach disorder has gained importance in research and development for curing skin diseases and leprosy²⁵. Availability of a large number of medicinal plants made Arunachal Pradesh one of the global biodiversity hot spot. The documentation on the traditional medicine of the *Tagin* tribe of Arunachal Pradesh illustrates the wide range of application of the traditional knowledge of medicinal plants for well being of the human society. Many people of this region still depend upon herbal medicine for the treatment of some common diseases. Thorough biochemical investigation along with clinical trials of these locally available herbal TM may provide new leads for human health care system. In addition, it will pave the way in creating the mass awareness regarding the need for conservation and economic empowerment of the local tribal people.

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