

## **SOME TRIBAL MEDICINAL PLANTS OF CHITTAGONG HILL TRACTS, BANGLADESH**

MOHAMMED YUSUF<sup>1</sup>, M.A. WAHAB, MD. YOUSUF, JASIM UDDIN CHOWDHURY  
AND JARIPA BEGUM

*BCSIR Laboratories, P.O. Chittagong Cantonment, Chittagong 4220, Bangladesh*

*Key words:* Hill Tracts, Medicinal plants, Traditional knowledge, Bangladesh

### **Abstract**

A survey was carried out in different localities of Rangamati and Bandarban Districts of Bangladesh between 2001 and 2002 to document medicinal plants. A total of 69 medicinal plants under 40 families were documented during this work, which the tribal use to treat about 50 diseases. Scientific names, tribal names of the plants, parts used, names of the diseases and names of the user communities are mentioned.

### **Introduction**

Chittagong Hill Tracts, consisting of Khagrachhari, Rangamati and Bandarban Districts and occupying 13,184 sq km of south-eastern part of Bangladesh, is rich in floral diversity. The forest composition could be broadly classified into 1) tropical semi-evergreen to wet-green, 2) deciduous, 3) bamboo brakes and grasslands (Khan 1977). At least 12 ethnic communities live in this region of which Chakma is the largest tribe concentrating in the Chakma circle of Rangamati and part of Khagrachhari Districts. They are followed by the Marma who are almost evenly distributed in all three districts. Tripura are concentrated in Khagrachhari. The other smaller ethnic communities are concentrated in Bandarban District (Roy *et al.* 2000).

Most of the tribal people still depend on local medicinal plants for the treatment of different diseases using the knowledge of herbal treatment they have inherited from their forefathers. But this ethno-medicinal knowledge and also the medicinal plants are depleting at an alarming rate due to availability of modern medical facilities and other socio-economic factors. On the other hand, this knowledge is valuable in searching new medicine for human welfare. In recent years interest in herbal medicines has increased considerably both at home and abroad as they are believed to be comparatively less toxic than the synthetics.

So far a limited work has been done to document ethno-medicinal plants in Chittagong Hill Tracts, namely Alam (1992), Rahman (1997), Rahman *et al.* (1998), Yusuf *et al.* (2002), Chakma *et al.* (2003), Rahman *et al.* (2003), Uddin and Rahman (1998), Uddin *et al.* (2004), Yusuf *et al.* (2005, 2006). Keeping this in mind, the present

---

<sup>1</sup>Corresponding author. E-mail: ctglab@spenectcg.com

attempt has been undertaken to contribute to the documentation of this valuable knowledge and information from the area before these are totally lost.

### Materials and Methods

The study was carried out in different localities of Marissa and Rajsthali belonging to Rangamati District and Lama of Bandarban and adjacent areas of Bandarban Sadar between 2001 and 2002. Information was documented in ethnobotanical data sheet by interviewing nine local *Baiddas* (tribal healers) and 11 elderly people and verified as far as possible by repeated queries and from other tribal healers. Voucher specimens were preserved at the herbarium of BCSIR (Bangladesh Council of Scientific and Industrial Research) Laboratories, Chittagong.

### Results and Discussion

Results have been presented in a tabular form in Table 1. Species are arranged alphabetically by their scientific names, followed by their family names in parenthesis and voucher numbers. Voucher number of some of the species could not be cited, because they were destroyed or lost, but their identities were confirmed. Tribal users and tribal names of the plants, localities, names of the diseases, and modes of uses have been given in different columns of the Table 1.

A total of 69 plant species have been documented during this investigation, which are used by the tribal peoples against about 50 diseases. Most of the plants are used in common diseases like, diarrhoea, dysentery, cough, catarrh, asthma, fever, headache, skin diseases, sore, boil, arthritis, leucorrhoea, menstrual problem, indigestion, constipation and stomachache. Only one plant, Kuchbihari (*Solanum* sp.) was found, according to the Chakma tribal healers (*Baidda*) of Toolaban area, to be used for the treatment of cancer. This plant has a very characteristic fruit. It is rare and found only under cultivation in the home garden of *Baidda* at Toolaban of Marissa. Uses of *Alpinia conchigera*, *Anisomeles indica*, *Baliospermum montanum*, *Centella asiatica*, *Costus speciosus*, *Jasminum scandens*, *Kaempferia galanga*, *Kaempferia parviflora*, *Kalanchoe pinnata*, *Maesa montana*, *Mikania cordata*, *Ocimum gratissimum*, *Oroxylum indicum*, *Plumbago indica*, *Plumbago zeylanica*, *Sterculia villosa*, *Typhonium trilobatum*, *Urena lobata* and *Zingiber montanum* match with the uses reported by different authors consulted here. Most of the previous authors only mentioned the name of the disease, whereas some of the authors mentioned the method of use. But they did not mention the dose. We have mentioned the tentative doses of use, but we do not encourage following them without verification. About 46% of the documented plant species are herbs followed by 31% shrubs, 13% trees and 10% climbers.

**Table 1. Description of the tribal medicinal plants recorded from different localities of Rangamati and Bandarban along with their users, locations to be found, diseases treated, modes of use and doses.**

Scientific name, (family name), voucher number	Users & their tribal name	Locality	Disease/ ailment	Mode of use & dose
1. <i>Achyranthes aspera</i> L. (Amaranthaceae) Wahab & Yousuf 1186	Tanchongya - <i>Lengragach</i>	Naramuk, Rajsthali	Dog & fox bite	The root paste is applied over the bite area as a preventive medicine against hydrophobia. It is applied once, immediately after bite.
2. <i>Acorus calamus</i> L. (Acoraceae) Wahab & Yousuf 1174 A	Tanchongya - <i>Boch</i>	Naramuk, Rajsthali	Stomachache, burn sore	Rhizome paste is given orally in stomachache; 1 teaspoonful, twice in a day. Rhizome paste is also applied as a poultice on burn sore, twice daily till cure.
3. <i>Adiantum lunulatum</i> Burm. (Adiantaceae) Wahab & Yousuf 1120	Chakma - <i>Bandortala</i>	Toolaban, Marissa	Boils	Paste of the plant is applied over boils to burst. It is applied 2/3 times a day.
4. <i>Aloe indica</i> L. (Liliaceae)	Tanchongya- <i>Ghrittakumari</i>	Naramuk, Rajsthali	Constipation, indigestion	Leaf juice is prescribed orally; 1 tablespoonful, twice daily for 3 days.
5. <i>Alpinia conchigera</i> Griff. (Zingiberaceae) Wahab & Yousuf 1131 Wahab & Yousuf 1174	Chakma - <i>Khetranga</i>	Toolaban, Marissa	Gastric pain	Piece of the rhizome is chewed or paste is swallowed with little salt; a small piece of rhizome or 1 table- spoonful of paste, 2/3 times a day.
6. <i>Annona muricata</i> L. (Annonaceae) Wahab & Yousuf 1388	Tanchongya - <i>Ketranga</i>	Naramuk, Rajsthali	Diarrhoea, dysentery	Rhizome juice is given orally; 1 teaspoon, thrice daily for 3-4 days.
7. <i>Anisomeles indica</i> (L.) Kuntze. (Lamiaceae) Wahab & Yousuf 1155	Marma - <i>Penchi</i>	Hangshamapara, Bandarban	Pain in hand & leg	Warm leaves are rubbed on hand and leg to get relief from pain.
8. <i>Antidesma ghasembilla</i> Gaertn. (Euphorbiaceae) Wahab & Yousuf 1377	Chakma - <i>Harinsingh</i>	Toolaban, Marissa	Fever, whoo- ping cough of children	Leaf juice is given orally; 1 teaspoonful, twice daily for 4-5 days.
	Marma - <i>Sapangseye</i>	Balaghata, Bandarban	Madness	Pills made from the bark are given orally; 2 pills, thrice daily till cure.

(Contd.)

**Table 1. (Contd.)**

Scientific name, (family name), voucher number	Users & their tribal name	Locality	Disease/ ailment	Mode of use & dose
9. <i>Argyrea nervosa</i> (Burm.f.) Boj. (Convolvulaceae) Wahab & Yousuf 1146	Chakma - <i>Bijtarak</i>	Tooaban, Marissa	Bone fracture	Paste of twigs and young leaves applied on fractured area and wrapped with cloth, which is changed after every 2-3 days.
10. <i>Baliospermum montanum</i> (Willd.) Muell.-Arg. (Euphorbiaceae) Wahab & Yousuf 1151	Chakma - <i>Subonpan</i>	Toolaban, Marissa	Eczema, sore in mouth & lip	Leaf paste is applied on affected areas; twice daily till cure.
11. <i>Cassia occidentalis</i> L. (Fabaceae) Wahab & Yousuf 1126	Chakma - <i>Khetrang</i>	Toolban, Marissa	Oliguria	Decoction of the leaves is prescribed orally; half a cup, thrice daily for 3 days.
12. <i>Celosia cristata</i> L. (Amaranthaceae) Wahab & Yousuf 1188	Tanchongya - <i>Moragful</i>	Naramuk, Rajsthali	Body swelling (dropsy)	Ash of the leaves is rubbed on the body and its juice is given orally as diuretic along with rice washed water; 1 tablespoon, thrice daily for 1 week.
13. <i>Centella asiatica</i> (L.) Urban. (Hydrocotylaceae) Wahab & Yousuf 1178	Tanchongya - <i>Menmuni sak</i>	Naramuk, Rajsthali	Blood dysentery	Leaf juice is given orally along with Opium, 1 tablespoon, thrice daily for 1 week.
14. <i>Clerodendrum viscosum</i> Vent. (Verbenaceae) Wahab & Yousuf 1121	Chakma - <i>Veg gach</i>	Toolaban, Marissa	Roundworms with indiges- tion, pain & vomiting	Paste of leaves and roots given orally; 2 teaspoons, twice daily for 3-4 days.
15. <i>Clitoria turnetea</i> L. (Fabaceae) Wahab & Yousuf 1154	Chakma - <i>Aingoful</i>	Toolaban, Marissa	Arthritic pain & wounds	Paste of leaves applied topically on affected area; twice a day.
16. <i>Costus speciosus</i> Sm. (Costaceae) Wahab & Yousuf 1132	Chakma - <i>Ketoki</i>	Toolaban, Marissa	Pus in ear along with earache	Ear is cleaned with 2-3 drops of leaf juice and leaf paste is applied around the ear.
17. <i>Croton caudatus</i> Geisel. (Euphorbiaceae) Wahab & Yousuf 1134	Chakma - <i>Sholokjara</i>	Toolaban, Marissa	Arthritis, paralysis	Root and leaf paste is applied topically for 1 week in arthritis, and for paralysis, for about a month or more.

(Contd.)

**Table 1. (Contd.)**

Scientific name, (family name), voucher number	Users & their tribal name	Locality	Disease/ ailment	Mode of use & dose
18. <i>Cymbopogon citratus</i> (DC.) Stapf. (Poaceae)	Tonchongya - <i>Dhansabrang</i>	Naramuk, Rajsthali	Stomach burning	Juice of leaves and roots is given orally; 1 teaspoon, thrice daily.
19. <i>Cynoglossum lanceolatum</i> Fotsk. (Boraginaceae) Wahab & Yousuf 1386	Marma - <i>Langio</i>	Lama, Bandarban	Inflation of belly	Leaf juice along with other ingredients is given orally; 1 tablespoon, thrice daily.
20. <i>Desmodium triquetrum</i> (L.) DC. (Fabaceae) Wahab & Yousuf 1145	Chakma - <i>Rulimatakher</i>	Toolaban, Marissa	Impotency, leucorrhoea	Pills made from the leaves along with the leaves of <i>Aloe indica</i> are given orally; 1 pill, 2-3 times a day.
21. <i>Dysophylla auricularia</i> Bl. (Lamiaceae) Wahab & Yousuf 1175 Wahab & Yousuf 1188a	Tanchongya - <i>Kongmain,</i> <i>Krongmain</i>	Naramuk, Rajsthali	Bellyache & discomfort in belly, tetanus	For bellyache and discomfort, warm leaf poultice is prescribed. In tetanus, leaf juice is given orally; 2 teaspoons, once at a time.
22. <i>Eclipta alba</i> (L.) Hassk. (Asteraceae) Wahab & Yousuf 1179	Tonchongya - <i>Kalasuna</i>	Naramuk, Rajsthali	Bleeding from nose and mouth	Leaf juice is given orally and as a drop in the nostril; 1 or 2 drops and 1 tablespoon, 2-3 times a day for 1 or 2 days.
23. <i>Emilia</i> sp. DC. (Asteraceae) Wahab & Yousuf 1144	Chakma - <i>Sidirabaisa</i>	Toolaban, Marissa	Dysentery, diarrhoea, paralysis Boil	Leaf juice given orally; 2-3 times a day, for a week. Leaf paste is applied as a rub in paralysis.  Leaf paste is applied as cataplasm for suppuration of boil.
24. <i>Eupatorium odoratum</i> L. (Asteraceae) Wahab & Yousuf 1184 A	Tonchongya - <i>Demrapata gach</i>	Naramuk, Rajsthali	Bleeding	Leaf paste applied on cut to stop bleeding.
25. <i>Gelonium multiflorum</i> (Euphorbiaceae) Wahab & Yousuf 1383	Marma - <i>Mainsingh</i>	Hangshamapara, Bandarban	Boil	Fruit paste is applied on boil for suppuration.

(Contd.)

**Table 1. (Contd.)**

Scientific name, (family name), voucher number	Users & their tribal name	Locality	Disease/ ailment	Mode of use & dose
26. <i>Grewia laevigata</i> Vahl. (Tiliaceae) Wahab & Yousuf 1143	Chakma - <i>Monsimais</i>	Toolaban, Marissa	Paralysis, pain	Pills made from the bark, root and leaf is prescribed orally; 1 pill, thrice daily till cure.
27. <i>Gynura nepalensis</i> DC. (Asteraceae) Wahab & Yousuf 1140	Chakma - <i>Dhup baisak</i>	Toolaban, Marissa	Arthritic pain, paralysis, bur- ning of body	Pills made from the leaves are given orally; 2 pills, thrice daily.
28. <i>Haemanthus multiflorus</i> Martyn (Amaryllidaceae) Wahab & Yousuf 1383	Marma - <i>Bolungbay</i>	Hangshamapara, Bandarban	Fever	Juice of the bulb is given orally; 1 tablespoon, thrice daily for 3 days.
29. <i>Helminthostachys zeylanica</i> Hook. (Ophioglossaceae) Wahab & Yousuf 1383	Marma - <i>Simakrangghi</i>	Lama, Bandarban	Jaundice	Root juice with other ingredients given orally; 1 teaspoon, twice daily for 10 days.
30. <i>Hymenictyon excelsum</i> Walp. (Rubiaceae) Wahab & Yousuf 1384	Tanchongya - <i>Fulgamari</i>	Naramuk, Rajsthali	Stiffness of belly	Root juice given orally and hot poultice of bark applied on belly for 2-3 days.
		Lama, Bandarban	Jaundice	Bath in the morning with leaf boiled water is prescribed for 10 days.
31. <i>Jasminum scandens</i> (Oleaceae) Wahab & Yousuf 1122	Chakma - <i>Moriccha lodi</i>	Toolaban, Marissa	Red eyes (Red cataract)	Leaf juice is used as a drop; 2 drops, twice daily till cure.
32. <i>Justicia gendarusa</i> L. (Acanthaceae) Wahab & Yousuf-1112 &1152	Chakma - <i>Basok</i>	Babupara, Marissa	Cough, catarrh, fever	Leaf juice given orally, alone or with honey; 1 tablespoon, 2-3 times a day for 1 week.
33. <i>Kaempferia galanga</i> L. (Zingiberaceae) Wahab & Yousuf 1154 A	Chakma - <i>Bhojorphul</i>	Toolaban, Marissa	Headache, paralysis of arms and legs	Rhizome paste is given as poultice in headache and as rub in paralysis, twice daily.

(Contd.)

**Table 1. (Contd.)**

Scientific name, (family name), voucher number	Users & their tribal name	Locality	Disease/ ailment	Mode of use & dose
34. <i>Kaempferia parviflora</i> Wall. ex Baker (Zingiberaceae) Wahab & Yousuf 1181	Tonchongya - <i>Kalahalood</i>	Naramuk, Rajsthali	Diarrhoea along with vomiting	Rhizome juice given orally; 1 teaspoon, 2-3 times a day for 3 days.
35. <i>Kalanchoe pinnata</i> (Lam.) Pers. (Crassulaceae)	Tanchongya - <i>Rockkia pangpo</i>	Naramuk, Rajsthali	Cough & asthma of children	Leaf juice dipped with red iron is given orally; 2 teaspoon, thrice daily for a week.
36. <i>Leea indica</i> (Burm.f.) Merr. (Leeaceae) Wahab & Yousuf 1130	Chakma - <i>Hashkura</i>	Toolaban, Marissa	Sore, leprosy, eczema, itching, bone fracture, sprain	Leaf paste used topically, 2-3 times a day for a week. For fracture and sprain, paste is applied as a poultice.
37. <i>Leea macrophylla</i> Roxb. (Leeaceae) Wahab & Yousuf 1176	Tonchongya - <i>Baggach</i>	Naramuk, Rajsthali	Boil, arthritis	Leaf juice is rubbed on affected area and heated with warm cloth. Leaf paste is applied on boil to burst.
38. <i>Leucas zeylanica</i> (L.) R.Br. (Lamiaceae) Wahab & Yousuf 1378	Marma - <i>Sarakao</i>	Balaghata, Bandarban	Burning urination	Leaf paste is given orally; 1 tablespoon, once a day.
39. <i>Litsea glutinosa</i> (Lour.) Rob. (Lauraceae) Wahab & Yousuf 1125	Chakma - <i>Surja gach</i>	Toolaban, Marissa	Boil, sore, itching	Leaf paste applied topically; twice daily.
40. <i>Maranta arundinacea</i> L. (Marantaceae) Wahab & Yousuf 1135	Chakma - <i>Ararut</i>	Toolaban, Marissa	Scanty urination along with pain in abdomen	Rhizome paste given orally; 1 tablespoon, 2-3 times a day. Also given to lactating mother to increase milk flow.
41. <i>Measa montana</i> A. DC. (Myrsinaceae) Wahab & Yousuf 1124	Chakma - <i>Medri</i>	Toolaban, Marissa	Arthritis, boil	Paste of the bark is applied as a poultice for arthritis, twice daily for 5 days. Applied on boil and kept whole day to hasten suppuration.

(Contd.)

**Table 1. (Contd.)**

Scientific name, (family name), voucher number	Users & their tribal name	Locality	Disease/ ailment	Mode of use & dose
42. <i>Micromelum minutum</i> (Forst. f.) Wt. & Arn. (Rutaceae) Wahab & Yousuf 1128 Wahab & Yousuf 1390	Chakma - <i>Songramarich</i> Marma - <i>Kakobai</i>	Toolaban, Marissa  Hangshamapara, Bandarban	Fever along with headache  Dog bite	Leaf and root juice is given orally in fever; 1 cup, thrice daily for 5 days.  Fruit paste is applied on bite area.
43. <i>Mikania cordata</i> (Burm.f.) Rob. (Asteraceae) Wahab & Yousuf 1184 A	Tanchongya - <i>Asamlata</i>	Naramuk, Rajsthali	Bleeding	Leaf paste is applied on cut area to stop bleeding.
44. <i>Morinda</i> sp. (Rubiaceae) Wahab & Yousuf 1379	Marma - <i>Khujai</i>	Balaghata, Bandarban	Fever along with catarrh	Paste of young leaves along with black pepper and garlic is rubbed on the chest, twice a day.
45. <i>Morinda persicaefolia</i> Ham. (Rubiaceae) Wahab & Yousuf 1380	Marma - <i>Khujai</i>	Balaghata, Bandarban	Cough, asthma	Leaf juice is given orally along with sugar; 1 teaspoon, thrice daily for 4-5 days.
46. <i>Nelsonia campestris</i> R.Br. (Acanthaceae) Wahab & Yousuf 1184	Tanchongya - <i>Chitpatang</i>	Naramuk, Rajsthali	Fever, tetanus	Leaf juice is rubbed on the body for several days.
47. <i>Ocimum gratissimum</i> L. (Lamiaceae) Wahab & Yousuf 1142	Chakma- <i>Midareissa</i>	Toolaban, Marissa	Cough, catarrh, headache, gout	Leaf juice along with honey or sugar is prescribed orally; 2 teaspoons, thrice daily for 3-5 days.
48. <i>Oroxylum indicum</i> Vent. (Bignoniaceae) Wahab & Yousuf 1118	Chakma- <i>Khona</i>	Babupara, Marissa	Jaundice	Juice of the fruit and bark is given orally; half a cup, thrice daily for 5 days.

(Contd.)



**Table 1. (Contd.)**

Scientific name, (family name), voucher number	Users & their tribal name	Locality	Disease/ ailment	Mode of use & dose
49. <i>Pedilanthus tithymaloides</i> (L.) Poit. (Euphorbiaceae) Wahab & Yousuf 1147	Chakma- <i>Barakut</i>	Toolaban, Marissa	Headache, impotency and seminal weakness	Paste of the plant is applied on forehead in headache. Pills made from the paste are given in impotency and seminal weakness; 2 pills, thrice daily.
50. <i>Perilla ocymoides</i> L. (Lamiaceae) Wahab & Yousuf 1136	Chakma- <i>Nagaghoissa</i>	Toolaban, Marissa	Cut, sore, bruises	Seed-paste is applied as an ointment; twice daily for healing.
51. <i>Phrynium imbricatum</i> Roxb. (Marantaceae) Wahab & Yousuf 1149	Chakma- <i>Pitulipata</i>	Toolaban, Marissa	Cough, catarrh, asthma, headache	Pills made from leaves are prescribed orally; 1 pill, 2-3 times a day.
52. <i>Phyllanthus</i> sp. (Euphorbiaceae) Wahab & Yousuf 1385	Marma- <i>Saykhoi</i>	Lama, Bandarban	Sexual weakness	Pills made from dry flowers along with other ingredients are given orally; 1 pill at night.
53. <i>Plumbago indica</i> L. (Plumbaginaceae) Wahab & Yousuf 1187	Tanchongya - <i>Agnichita</i>	Naramuk, Rajsthali	Anaemia, irregular menstruation, leucorrhoea, skin disease	In skin disease, leaf and root juice is applied topically, in other cases juice is given orally; 1 teaspoon, once daily for 5 days. It is also given orally to develop sterility in women; 1 tablespoon, daily for consecutive 3 days. Roots are used to induce abortion.
54. <i>Plumbago zeylanica</i> L. (Plumbaginaceae)	Chakma- <i>Chita</i>	Toolaban, Marissa	Leucorrhoea, menstrual problem, jaundice	Root paste is given orally; 1 teaspoon, twice daily for 7 days.
55. <i>Podocarpus nerifolia</i> Don. (Podocarpaceae) Wahab & Yousuf 1115	Chakma- <i>Bajpata gach</i>	Babupara, Marissa	Gastric	Juice of the root and leaf is given orally; half a cup, 2-3 times daily.

(Contd.)

**Table 1. (Contd.)**

Scientific name, (family name), voucher number	Users & their tribal name	Locality	Disease/ ailment	Mode of use & dose
56. <i>Rauwolfia serpentina</i> Benth. (Apocynaceae) Wahab & Yousuf 1137	Chakma- <i>Sursan</i>	Toolaban, Marissa	Snakebite, headache	Root paste is given orally; half a teaspoon, twice daily.
	Tanchongya - <i>Bombaraja</i>	Naramuk, Rajsthali	Heart disease, stomachache	Half a teaspoon, once daily for a month for heart disease and 1 teaspoon, at a time for stomachache.
57. <i>Sarcochlamys pulcherrima</i> Gaud. (Urticaceae) Wahab & Yousuf 1387	Marma- <i>Masada</i>	Lama, Bandarban	Boil, sore	Leaf paste is applied topically; once a day for 3 days.
58. <i>Scoparia dulcis</i> L. (Scrophulariaceae) Wahab & Yousuf 1183	Tanchongya - <i>Postanoipata</i>	Naramuk, Rajsthali	Stomachache	Leaf juice is given orally; 1 tablespoon, twice daily.
59. <i>Solanum</i> sp. (Solanaceae) Wahab & Yousuf 1141	Chakma- <i>Kuchbihari</i>	Toolaban, Marissa	Cancer, sore, wounds	Paste of the fruit is applied topically; 2-3 times a day.
60. <i>Spilanthes</i> sp. (Asteraceae) Wahab & Yousuf 1177	Tanchongya - <i>Osonsak</i>	Naramuk, Rajsthali	Threadworm	Leaf juice is given orally; half a cup, once or twice a day.
61. <i>Stahlianthus involucratus</i> (King ex Baker) R.M. Smith (Zingiberaceae) Wahab & Yousuf 1189	Tanchongya - <i>Eskain</i>	Rajsthali, Rangamati	Fever, tetanus of children	Rhizome juice is given orally; 1 teaspoon, thrice daily for 5 days.
62. <i>Stephania japonica</i> (Thunb.) Miers. (Menispermaceae) Wahab & Yousuf 1153	Chakma- <i>Thandamanik</i>	Marissa, Rangamati	Facial paralysis	Leaf paste is applied topically over affected areas; twice daily for 7 days.
63. <i>Sterculia villosa</i> Roxb. (Sterculiaceae) Wahab & Yousuf 1139	Chakma- <i>Udal</i>	Marissa, Rangamati	Impotency	Pills made from the root along with the root of <i>Bombax ceiba</i> and leaves of <i>Aloe indica</i> is prescribed orally; 1 pill, thrice a day for 3 weeks.

(Contd.)

**Table 1. (Contd.)**

Scientific name, (family name), voucher number	Users & their tribal name	Locality	Disease/ ailment	Mode of use & dose
64. <i>Thunbergia grandiflora</i> Roxb. (Acanthaceae) Wahab & Yousuf 1180	Tanchongya - <i>Botualodi</i>	Rajsthali, Rangamati	Red eyes	Air blown through the cut hollow stem into the eyes; done for 3 days.
65. <i>Typhonium trilobatum</i> (L.) Schott. (Araceae) Wahab & Yousuf 1138	Chakma- <i>Harbaj</i>	Marissa, Rangamati	Enlarged liver	Pills made from the corm along with black pepper are prescribed orally; 1 pill, thrice daily for 1 month.
66. <i>Uraria picta</i> Desv. (Fabaceae)	Chakma- <i>Bilailengur</i>	Marissa, Rangamati	Suppuration of boil	Leaf paste is applied topically on boil to burst.
67. <i>Urena lobata</i> L. (Malvaceae) Wahab & Yousuf 1185	Tanchongya - <i>Lengragach</i>	Rajsthali, Rangamati	Snakebite, bite of dog and fox	Root paste is applied on bite area as a poultice and 1 tablespoon of paste is given orally.
68. <i>Vitis</i> sp. (Vitaceae) Wahab & Yousuf 1119	Chakma- <i>Koishanglota,</i> <i>Khoijang</i>	Marissa, Rangamati	Broken bones	Leaf paste is applied as a poultice on broken area and changed after a week.
Wahab & Yousuf 1129		Toolaban	Cough, catarrh, fever with convulsion	Root juice mixed with water is given orally; half a cup, thrice daily for 4-5 days.
69. <i>Zingiber montanum</i> (Koenig) Dietr. (Zingiberaceae) Wahab & Yousuf 1182	Tanchongya - <i>Paley</i>	Rajsthali, Rangamati	Amenorrhoea	Rhizome juice is given orally; 1 tablespoon, 1-2 times a day for 2-3 days.

### Acknowledgements

The authors are grateful to the Ministry of Science and Information & Communication Technology, Government of the People's Republic of Bangladesh, for providing financial support to carry out this investigation. Thanks are also due to the Director BCSIR (Bangladesh Council of Scientific and Industrial Research) Laboratories, Chittagong for his generous co-operation and encouragement during the work.

### References

- Alam, M.K. 1992. Medical ethnobotany of the Marma Tribe of Bangladesh. *Economic Botany* **46**(3): 330-335.
- Chakma, S., Hossain, M.K., Khan, B.M. and Kabir, M.A. 2003. Ethno-botanical knowledge of Chakma community in the use of medicinal plants in Chittagong Hill Tracts, Bangladesh. *MFP News* **XIII**(3): 3-7.
- Khan, M.S. and Alam, M.K. 1977. Flora of Bangladesh. No. **4** Commelinaceae. Bangladesh National Herbarium, Dhaka, pp. 1-41.
- Rahman, M.A. 1997. Tribal knowledge of plant use in Hill Tracts districts of Bangladesh. *Biodiversity Newsletter, University of Chittagong* **1**(1): 1.
- Rahman, M.A., Uddin, S.B. and Khisha, A. 1998. A report on some anti-jaundice plants from tribal community of Hill Tracts districts. *Biodiversity Newsletter, University of Chittagong* **2**(1): 4.
- Rahman, M.A., Uddin, S.B. and Wilcock, C.C. 2003. Indigenous knowledge of herbal medicine in Bangladesh: Treatment of jaundice by the tribal community of Hill Tracts Districts. *Hamdard Medicus* **XLVI**(2): 25-28.
- Roy, R.D., Guhathakurta, M., Mohsin, A., Tripura, P. and Gain, P. 2000. The Chittagong Hill Tracts (Life and Nature at Risk). Society for Environment and Human Development (SHED), Dhaka.
- Uddin, S.B. and Rahman, M.A. 1998. Some anti-rheumatic plants used by tribal people of the Hill Tracts districts. *Biodiversity Newsletter, University of Chittagong* **2**(2): 4.
- Uddin, N.S., Uddin, M.Z., Hassan, M.A. and Rahman, M.M. 2004. Preliminary ethnomedicinal plant survey in Khagrachari District, Bangladesh. *Bangladesh J. Plant Taxon.* **11**(2): 39-48.
- Yusuf, M., Rahman, M.A., Chowdhury, J.U. and Begum, J. 2002. Indigenous knowledge about the use of zingibers in Bangladesh. *J. Econ. Taxon. Bot.* **26**(3): 566-570.
- Yusuf, M., Wahab, M.A., Chowdhury, J.U. and Begum, J. 2005. Herbal treatment of Jaundice in Chittagong Hill Tracts by Chakma and Marma tribes. *J. Forestry Environment* **3**: 13-18.
- Yusuf, M., Wahab, M.A., Chowdhury, J.U. and Begum, J. 2006. Ethno-medico-botanical knowledge from Kaukhali proper and Betunia of Rangamati district. *Bangladesh J. Plant Taxon.* **13**(1): 55-61.

*(Manuscript received on 4 June 2007; revised on 25 July 2007)*