Indian Journal of Traditional Knowledge
Vol. 6(3), July 2007, pp. 417-422

Herbal recipe prepared during *Bohag* or *Rongali Bihu* in Assam

Samim Sofika Begum* & Rajib Gogoi

Botanical Survey of India, Eastern Circle, Shillong793003, Meghalaya
E-mail: samimbegum@rediffmail.com

Received 7 April 2006; revised 25 August 2006

The work relates to the herbal recipe prepared during *Bohag* or *Rongali Bihu* in Assam. For the preparation of this recipe, 101 plant species are used. In the paper, each species is provided with plant name, family, vernacular name, plant parts used and their other uses.

Key words: Herbal recipe, *Bohag, Rongali Bihu, Bodo, Mishing, Karbi, Deori, Sonowal-Kachari, Dimasha, Rabha,* Assam

IPC Int. Cl.^{8}: A61K36/00, A01G1/00, A01G17/00, A47G19/00, A23L1/00, A23L1/06, A23L2/02

Assam, the second largest state of Northeast India, situated between 24°2´-27°6´N latitude and 89°8´-96°E longitude covers an area of 78,438 sq km of which about 23, 688 sq km area is covered by forests. Of the total population, 10.98 % are scheduled tribes. The population of the state is heterogeneous. Austro-Asiatics, Negretos, Dravidians, Indo-Mongoloides, Tibeto-Burmes and Aryans contributed in their own way in the historic ages and formed a unique community, i.e. *Ashomiya* (Assamese*)*. The main tribes of the state are *Bodo, Mishing, Karbi, Deori, Sonowal-Kachari, Dimasha, Rabha*, etc. *Bodo* is the largest among all the tribes in the state. Most of these ethnic groups depend on the natural forests for their day-to-day life. Agriculture is the main occupation and rice is their principal food.

Ashomiya people have their own custom and tradition for different types of festival and dance, which reflect their way of life. Assam is a state with rich cultural heritage. *Bihu* is the most important festival in the state. It is an agriculture-based festival, celebrated with much pomp and gaiety and religious festivity. There are three *Bihus*, viz. *Bohag* or *Rongali*, *Magh* or *Bhugali* and *Kati* or *Kangali*. *Bohag* or *Rongali* is the festival of joy with cultural milieu of the people living in the state. It is held from the last day of *Choat* (last month of Assamese calendar) and continued for 7 days of *Bohag* (first month of Assamese calendar) and the middle of April. *Bihu Naas* (*Bihu* dance) and *Bihu Naam* (Bihu song) are unique art forms of Assamese culture. *Bihus* are also well celebrated in the month of *Magh* (middle of January) and *Kati* (middle of October), respectively. *Bohag Bihu* is the main *Bihu* of the state. The first day of the *Bohag Bihu* is called *Goru* (cow) *Bihu* and in that particular day, people collect 101 plant species, which are locally known as *Akhoh ata sak* and prepare recipe in the evening. They believe that this special recipe has some medicinal values, which is good for health for the next year too. In the paper an attempt has been made to enumerate 101 plant species with their families, vernacular name and plant parts used and other uses.

*Corresponding author

Methodology

The study was undertaken during the year 2004-2005. The information was gathered by conducting survey in the different districts of the state. Plant specimens were collected and processed[1]. Identification was confirmed with authentic specimens deposited at Regional Herbarium (ASSAM) and with the literature available at the library of Botanical Survey of India, Eastern Circle, Shillong. Each species is provided with an up to date nomenclature, family, vernacular name (Assamese), parts used and other uses.

Result & discussion

The present study involved a total of 109 species under 90 genera and 56 families. Although 109 plant species are enumerated in the study (Table 1), usually 101 species are used to prepare the recipe. Due to unavailability of some species in some areas another species are selected from these 109 species. Family

Table 1—Plants used in the preparation of herbal recipe in Assam

Plant name	Family	Local name	Parts used	Other uses
Allium cepa L.	Liliaceae	*Piyaz*	Bulb, Leaf	Vegetable, Condiment
A. sativum L.	-do-	*Nohoru*	Bulb, Leaf	Vegetable, Condiment
Aloe vera (L.) Burm. f.	-do-	*Sal kuwari*	Leaf	Medicinal
Alpinia nigra (Gaertn.) Burtt	Zingiberaceae	*Tora*	Rhizome	Medicinal
Alternanthera sessilis (L.) R. Br. ex. DC.	Amaranthaceae	*Mati kaduri*	Leaf	Vegetable, Medicinal
A. philoxeroides (Mart.) Griseb.	-do-	*Pani khutura*	Leaf	Vegetable
Amaranthus spinosus L.	-do-	*Hati khutura*	Leaf	Vegetable, Medicinal
A. viridis L.	-do-	*Khutura*	Leaf	Vegetable, Medicinal
Andrographis paniculata (Burm. f.) Wall. ex Nees	Acanthaceae	*Kalmegh*	Leaf	Medicinal
Artocarpus heterophyllus Lamk.	Moraceae	*Kothal*	Young Fruit	Fruit edible
Azadirachta indica A. Juss.	Meliaceae	*Moha neem*	Leaf	Medicinal
Bacopa monnieri (L.) Pennell.	Scrophulariaceae	*Brahmi*	Leaf	Medicinal
Bambusa balcooa Roxb.	Poaceae	*Bholuka banh*	Young shoot	Vegetable, Culms used for making household materia
Basella alba L.	Basellaceae	*Puroi sak*	Leaf	Vegetable
Benincasa hispida (Thunb.) Cog [Fig. F]	Cucurbitaceae	*Kumura*	Fruit	Vegetable
Boerhavia diffusa L	Nyctaginaceae	*Panarnawa*	Leaf	------
B. juncea (L.) Czern.	-do-	*Lai sak*	Leaf	Vegetable
Brassica nigra (L.) Koch.	Brassicaceae	*Soriyah*	Leaf, Seed	Vegetable
Calamus erectus Roxb.	Arecaceae	*Bet gaz*	Rhizome shoot	Vegetable
Centella asiatica (L.) Urban.	Apiaceae	*Bor mani muni*	Leaf	Vegetable, Medicinal
Chenopodium album L.	Chenopodiaceae	*Bali bhotora/ Jil mil*	Leaf	Vegetable, Medicinal
Chrysanthemum coronarium L.	Asteraceae	*Babori*	Leaf	Vegetable
Cinnamomum bejolghota (Buch.–Ham.) Sweet.	Lauraceae	*Pati hunda*	Leaf	Medicinal
C. tamala Fr.	-do-	*Tez pat*	Leaf	Medicinal, Spice & condiment
Clerodendrum colebrookianum Walp.	Verbenaceae	*Nephaphu*	Leaf	Medicinal
C. serratum (L.) Moon	-do-	*Nangal bhanga*	Leaf	Medicinal
C. viscosum Vent . [Fig. B.]	-do-	*Dhopat tita*	Leaf	Medicinal
Colocasia esculenta (L.) Schott [Fig. L.]	Araceae	*Kochu*	Leaf	Vegetable,Medicinal
Commelina benghalensis L.	Commelinaceae	*Kona himolu*	Leaf	Medicinal
Corchorus capsularis L.	Tiliaceae	*Tita mora/ Mora pat*	Leaf	Vegetable, Medicinal
Croton caudatus Geisel.	Euphorbiaceae	*Mahudi*	Leaf	Medicinal
Cucurbita maxima Duch. ex Lamk.	Cucurbitaceae	*Ronga lau*	Fruit	Vegetable
Curcuma longa L.	Zingiberaceae	*Halodhi*	Rhizome	Medicinal, Spice & condiment

Contd.

Table 1—Plants used in the preparation of herbal recipe in Assam—*Contd.*

Plant name	Family	Local name	Parts used	Other uses
Dendrocnide sinuata (Bl.) Chew	Urticaceae	*Surat gas*	Leaf	Medicinal
Dillenia indica L. [Fig. D]	Dilleniaceae	*Ou tenga*	Fruit	Vegetable, Medicinal
Diplazium esculentum (Retz.) Sw.	Athyriaceae	*Dhekia*	Frond	Vegetable
Drymaria diandra Bl. [Fig. N]	Caryophyllaceae	*Lai jabori*	Leaf	Vegetable, Medicinal
Duchesnea indica (Andr.) Focke	Rosaceae	*Goru khis*	Fruit, Leaf	Fruit edible
Eclipta prostrata L.	Asteraceae	*Keha raj*	Leaf	Medicinal
Enhydra fluctuans Lour.	-do-	*Heloshi*	Leaf	Vegetable, Medicinal
Eryngium foetidum L.	Apiaceae	*Man dhoniya*	Leaf	Spice & condiment
Euphorbia hirta L.	Euphorbiaceae	*Gakhiroti/ Dhudh bon*	Leaf	Medicinal
Fagopyrum esculentum Moench.	Polygonaceae	*Sutiya lofa*	Leaf	Vegetable
Flemingia strobilifera (L.) R. Br. ex Ait.	Fabaceae	*Makhioti*	Leaf	Insect repellent
Garcinia acuminata Planch. & Triana	Clusiaceae	*Mahi thekera*	Fruit	Medicinal
G. kydia Roxb.	-do-	*Kujithekera*	Fruit	Medicinal
G. pedunculata Roxb.	-do-	*Bor thekera*	Fruit	Medicinal
Hedyotis corymbosa (L.) Lamk.	Rubiaceae	*Bon jaluk*	Tender shoot	Medicinal
Hibiscus sabdariffa L.	Malvaceae	*Tenga mora*	Leaf	Vegetable
Houttuynia cordata Thunb.	Saururaceae	*Moshundari*	Leaf	Vegetable, Medicinal
Hydrocotyl sibthorpioides Lamk.	Apiaceae	*Horu mani muni*	Leaf	Vegetable, Medicinal
Ipomoea aquatica Forsk.	Convolvulaceae	*Kolmou sak*	Leaf	Vegetable,
Kalanchoe pinnata (Lamk.) Pers.	Crassulaceae	*Dupor tenga/ Pate goja*	Leaf	Medicinal
Lagenaria siceraria (Molina) Stadley	Cucurbitaceae	*Jati lau*	Fruit	Vegetable
Lasia spinosa (L.) Thw. [Fig. K]	Areceae	*Seng mora*	Leaf	Medicinal
Lawsonia inermis L.	Lythraceae	*Jetuka*	Leaf	Medicinal, Dye
Leucas plukenetii (Roth.) Spreng.	Lamiaceae	*Durun*	Leaf	Vegetable, Medicinal
Lindernia ruellioides (Colsm.) Pen	Scrophulariaceae	*Kasi doriya*	Leaf	Medicinal
Litsea salicifolia (Roxb. ex Wall.) Hk. f.	Lauraceae	*Digh loti*	Leaf	Medicinal
Luffa acutangula (L.) Roxb. [Fig. M]	Cucurbitaceae	*Jika*	Fruit	Vegetable
L. cylindrica (L.) M. Roemer	-do-	*Bhol*	Fruit	Vegetable
Lygodium flexuosum (L.) Sw.	Lygodiaceae	*Kopou dhekia*	Frond	Medicinal
Mangifera indica L.	Anacardiaceae	*Am*	Young fruit	Fruit edible, Medicinal
Melastoma malabathricum L.	Melastomataceae	*Phutkola*	Leaf	Medicinal
Melothria heterophylla (Lour.) Cogn.	Cucurbitaceae	*Beli poka*	Fruit, Leaf	Medicinal

Contd.

Table 1—Plants used in the preparation of herbal recipe in Assam—*Contd.*

Plant name	Family	Local name	Parts used	Other uses
Mentha spicata L.	Lamiaceae	*Podina*	Leaf	Condiment, Medicinal
Momordica charantia L.	Cucurbitaceae	*Tita kerela*	Fruit, Leaf	Vegetable
M. cochinchinensis (Lour.) Spreng.	-do-	*Bhat kerela*	Fruit, Leaf	Vegetable
Monochoria hastata (L.) Solms. [Fig. H]	Pontedariaceae	*Haru meteka*	Inflorescence	Vegetable
Morinda angustifolia Roxb.	Rubiaceae	*Anshu gas*	Leaf	Medicinal
Moringa oleifera Lamk.	Moringaceae	*Sojina*	Fruit	Vegetable
Morus indica L.	Moraceae	*Nuni*	Leaf	Fruit edible
Murraya koenigii (L.) Spreng. [Fig. G]	Rutaceae	*Norosingha*	Leaf	Spice & condiment, Medicinal
Musa balbisiana Colla	Musaceae	*Kol gas*	Inflorescence	Vegetable, Medicinal
Mussaenda roxburghii Hk. f. [Fig.C]	Rubiaceae	*Sukloti*	Leaf	Medicinal
Nelumbo nucifera Gaertn.	Nelumbonaceae	*Podum*	Root stalk	Vegetable
Nyctanthes arbor-tristis L.	Nyctaginaceae	*Sewali*	Leaf	Vegetable, Medicinal
Nymphaea nouchali Burm. f.	Nympheaceae	*Bhet phul*	Root stalk	Vegetable
Ocimum basilicum L.	Lamiaceae	*Bon tulsi*	Leaf	Medicinal
Oxalis corniculata L.	Oxalidaceae	*Horu tengeshi*	Leaf	Vegetable, Medicinal
O. debilis H. B. K. var. *corymbosa* (DC.) Lour.	-do-	*Bor tengeshi*	Leaf	Vegetable, Medicinal
Paederia foetida L.	Rubiaceae	*Bhedai lota*	Leaf	Vegetable, Medicinal
Phlogacanthus thyrsiflorus (Roxb.) Nees	Acanthaceae	*Tita phul*	Flower, Leaf	Vegetable, Medicinal
P. tubiflorus Nees .	-do-	*Titaphul*	Flower, Leaf	Vegetable, Medicinal
Phyllanthus emblica L.	Euphorbiaceae	*Amlokhi*	Fruit	Fruit edible, Medicinal
Piper longum L.	Piperaceae	*Pipolee*	Leaf	Medicinal
P. hamiltonii DC.	-do-	*Arani pan*	Leaf	Medicinal
Plantago erosa Wall.	Plantaginaceae	*Singa pat*	Leaf	Medicinal
Pogostemon benghalense (Burm. f.) Kuntz.	Lamiaceae	*Hukloti*	Leaf	Medicinal
Polygonum plebeium R. Br.	Polygonaceae	*Bon jaluk*	Leaf	Medicinal
P. scandens Meissn.	-do-	*Modhu huleng*	Leaf	Vegetable, Medicinal
Portulaca oleracea L.	Portulacaceae	*Hanh thengia/ Malbhug khutura*	Tender Shoot	Vegetable
Prunus jenkinsii Hk. f. & Th.	Rosaceae	*Thereju tenga*	Fruit	Fruit edible
Psidium guajava L.	Myrtaceae	*Modhuri*	Leaf	Fruit edible, Medicinal
Rubus ellipticus Smith.	Rosaceae	*Jetuli poka*	Fruit	Fruit edible, Medicinal
Sarcochlamys pulcherrima Gaud.	Urticaceae	*Meshangi*	Leaf	Vegetable, Medicinal
Sesamum orientale L.	Pedaliaceae	*Til*	Seed	Spice
Smilax perfoliata Lour.	Smilacaceae	*Tikoni Barua*	Tender Shoot	Vegetable, Medicinal

Contd.

Table 1—Plants used in the preparation of herbal recipe in Assam—*Contd.*

Plant name	Family	Local name	Parts used	Other uses
Solanum indicum L.	Soalanaceae	*Tita bhekuri*	Leaf, Fruit	Vegetable, Medicinal
S. melongena L.	-do-	*Bengana*	Fruit	Vegetable
S. nigrum L.	-do-	*Pok mou/ Lach koshi*	Leaf	Vegetable, Medicinal
S. torvum Sw.	-do-	*Hati bhekuri*	Fruit	Vegetable, Medicinal
S. tuberosum L.	-do-	*Alu*	Leaf, Tuber	Vegetable
Stephania japonica (Thunb.) Miers. [Fig.A]	Menispermaceae	*Tubuki lota*	Leaf	Medicinal
Tetrastigma thomsonianum Planch	Vitaceae	*Nol tenga*	Leaf	Vegetable, Medicinal
Urena lobata L.	Malvaceae	*Agora*	Leaf	Medicinal
Vitex negundo L.[Fig.I]	Verbenaceae	*Poshotiya*	Leaf	Medicinal
Zanthoxylum nitidum (Roxb.) DC. [Fig. J]	Rutaceae	*Tez moi*	Leaf	Medicinal
Zingiber officinale Rosc. [Fig. E]	Zingiberaceae	*Ada*	Rhizome	Spice& Condiment, Medicinal

Cucurbitaceae represents the highest number of plants with 8 species; followed by Solanaceae with 5 species, Amaranthaceae, Lamiaceae, Rubiaceae & Verbenaceae with 4 species, each; Asteraceae, Euphorbiaceae, Liliaceae, Acanthaceae, Apiaceae, Clusiaceae, Lauraceae, Rosaceae, Polygonaceae, and Zingiberaceae with 3 species each. Moraceae, Scrophulariaceae, Nyctaginaceae, Brassicaceae, Araceae, Urticaceae, Malvaceae, Rutaceae, Oxalidaceae & Piperaceae were represented by 2 species each. Rest 30 families represent only 1 species each. Among 109 species, 2 species belong to Pteridophytes.

Assam is an important area of Indian mega diversity centre, where different types of tribes and communities reside together with a unique cultural heritage. Different kinds of food and different recipes are part of cultural identity. So, people of a certain province always search those kinds of ingredients for their food staff that can give them energy to thrive in that situation. As a part of moist tropical weather, the state is an area of different seasonal epidemics and also harbours a good number of medicinal and nutritious plants (Table 1). Every plant bears some phytochemicals that can boost or enhance the power of immunity of human body. This is the only reason that a good number of medicinal plants are tried to analyze their chemical constituent for better improvement of the health[2]. Different people of Assam make a vegetable recipe in the first day of the month of *Bohag*. The day starts with a fascinating programme that all the cows of the village brought near to the river or stream, where they are given bath and after bath every cattle owner use to give pieces of *Lao* [*Lagenaria siceraria* (Molina) Stadley], *Kumura* [*Benincasa hispida* (Thunb.) Cogn.], *Bengena* (*Solanum melongena* L.), *Bor Thekera* (*Garcinia pedunculata* Roxb.), *Kerala* (*Momordica charantia* L.), *Halodhi* (*Curcuma longa* L.) to their cattle, wishing their good health and clean them with the inflorescence of Makhioti [*Flemingia strobilifera* (L.) R. Br. ex Ait.] and leafy branches of *Dighloti* [*Litsea salicifolia* (Roxb. ex Wall.) Hk. f.]. In the evening, arrival of the cattle from grazing they are treated as God. New rope made of *Tora* [*Alpinia nigra* (Gaertn.) Burtt], *Odal* (*Sterculia villosa* Willd.), *Mora pat* (*Corchorus capsularis* L.) is tied around their neck. Fumigation by some plants, like *Bihlongoni* [*Crystella parasitica* (L.) Lev.], *Tikoni barua* (*Smilax perfoliata* Lour.), *Makhioti* [*Flemingia strobilifera* (L.) R. Br. ex Ait.] etc. is done in the *Guhali* (cow shed). These all signifies the agricultural based system of the society in Assam.

During *Bohag Bihu*, *Bihu Naasoni* (lady *Bihu* dancer) decorates or paint their palms and heels by using *Jetuka* (*Lawsonia inermis* L.) and also decorates their hair knob with *Kopou phul* (*Rhynchostylis retusa* (L.) Bl. / *Aredies multiflorum* Roxb.). *Jetuka* is a medicinal plant and prevents many skin diseases. *Bihu Naas* (*Bihu* dance) is a symbol of fertility and people believes that by this dance the earth will be fertile.

Giving bath and cleaning with some insect repellent plant indicates that the cattle are the main resources and their good health can give better result in agriculture. Fumigation by different plant species removes different flies and insects from household, which can bring or spread epidemics. In the evening, the herbal recipe is prepared in every house. The significance of preparation of this kind of recipe on the first day of the year is that due to the consumption of so many plant products containing good numbers of phytochemicals will help to protect from diseases. The people of Assam acquired the knowledge of using these plants in the recipe since time immemorial.

Acknowledgement

Authors are thankful to the Director, Botanical Survey of India, Kolkata and Deputy Director, Botanical Survey of India, Eastern Circle, Shillong for facilities and encouragement; Dr SK Borthakur, Head of Botany Department, Gauhati University, Guwahati for his valuable guidance. Thanks are also due to Mr Hemanta Kr Das, Md Amad Uddin, Mrs Chaya Deori and Mr Hajal Samati for their valuable help.

References

1 Jain SK & Rao RR, *Handbook of Field and Herbarium Methods*, (Today & Tomorrow’s Printers and Publishers, New Delhi), 1977.

2 Chatterjee A & Pakrashi SC, *The Treatise of Indian Medicinal Plants,* (Publications and Information Directorate, CSIR, New Delhi), (1-6) (1991-1995).