Vol 3 Issue 7 Aug 2013

Impact Factor: 0.2105 ISSN No: 2230-7850

Monthly Multidisciplinary Research Journal

Indian Streams Research Journal

Executive Editor

Ashok Yakkaldevi

Editor-in-chief

H.N.Jagtap

IMPACT FACTOR: 0.2105

Welcome to ISRJ

RNI MAHMUL/2011/38595

ISSN No.2230-7850

Indian Streams Research Journal is a multidisciplinary research journal, published monthly in English, Hindi & Marathi Language. All research papers submitted to the journal will be double - blind peer reviewed referred by members of the editorial Board readers will include investigator in universities, research institutes government and industry with research interest in the general subjects.

International Advisory Board

Flávio de São Pedro Filho

Federal University of Rondonia, Brazil

Kamani Perera Regional Centre For Strategic Studies, Sri

Lanka

Janaki Sinnasamy

Librarian, University of Malaya [

Malaysia]

Romona Mihaila Spiru Haret University, Romania

Delia Serbescu

Spiru Haret University, Bucharest, Romania

Anurag Misra

DBS College, Kanpur

Titus Pop

Mohammad Hailat Hasan Baktir

Dept. of Mathmatical Sciences, English Language and Literature

University of South Carolina Aiken, Aiken SC Department, Kayseri

29801

Abdullah Sabbagh

Engineering Studies, Sydney

Catalina Neculai University of Coventry, UK

Ecaterina Patrascu

Spiru Haret University, Bucharest

Loredana Bosca

Spiru Haret University, Romania

Fabricio Moraes de Almeida

Federal University of Rondonia, Brazil

Editorial Board

George - Calin SERITAN Postdoctoral Researcher

Ghayoor Abbas Chotana

Department of Chemistry, Lahore University of Management Sciences [PK

AL. I. Cuza University, Romania

Spiru Haret University, Bucharest,

Spiru Haret University, Romania

College of Business Administration

Director Managment Institute, Solapur

Head Education Dept. Mumbai University,

Head Humanities & Social Science

Anna Maria Constantinovici

Horia Patrascu

Romania

Ilie Pintea,

PhD, USA

Xiaohua Yang

Nawab Ali Khan

Rajendra Shendge Director, B.C.U.D. Solapur University,

R. R. Yalikar

Umesh Rajderkar

YCMOU, Nashik

S. R. Pandya

Solapur

R. R. Patil

Head Geology Department Solapur

Pratap Vyamktrao Naikwade

University, Solapur

Rama Bhosale

Prin. and Jt. Director Higher Education, Panvel

Salve R. N.

Department of Sociology, Shivaji University, Kolhapur

Govind P. Shinde

Bharati Vidyapeeth School of Distance Education Center, Navi Mumbai

Chakane Sanjay Dnyaneshwar Arts, Science & Commerce College,

Indapur, Pune

Awadhesh Kumar Shirotriya

Secretary, Play India Play (Trust), Meerut Sonal Singh

ASP College Devrukh, Ratnagiri, MS India Ex - VC. Solapur University, Solapur

N.S. Dhaygude

Ex. Prin. Dayanand College, Solapur

Narendra Kadu

Iresh Swami

Jt. Director Higher Education, Pune

K. M. Bhandarkar

Praful Patel College of Education, Gondia

Sonal Singh

Vikram University, Ujjain

G. P. Patankar

S. D. M. Degree College, Honavar, Karnataka Shaskiya Snatkottar Mahavidyalaya, Dhar

Maj. S. Bakhtiar Choudhary Director, Hyderabad AP India.

S.Parvathi Devi

Ph.D.-University of Allahabad

Rahul Shriram Sudke

Alka Darshan Shrivastava

Devi Ahilya Vishwavidyalaya, Indore

S.KANNAN

Ph.D, Annamalai University, TN

Satish Kumar Kalhotra

Address:-Ashok Yakkaldevi 258/34, Raviwar Peth, Solapur - 413 005 Maharashtra, India Cell: 9595 359 435, Ph No: 02172372010 Email: ayisrj@yahoo.in Website: www.isrj.net

ETHNO - MEDICINE, FOLKLORE AND IPR: A STUDY AMONG SEVEN VILLAGES OF LAKHIMPUR DISTRICT, ASSAM

Karuna Kanta Kakati

Assistant Professor, Lakhimpur Kendriya Mahavidyalaya

Abstract: There are 47 nos of ethno botanical species (plants) belonging to 40 nos. of family has been collected among the various castes population of Narayanpur areas of Lakhimpur district, Assam. The people of those very communities have been practicing traditional medicine by using different parts of these plants for treatment of various human ailments. The communities inhabiting in the study areas are Brahmin, Gosai, Kalita, Koch, Kaibarta, Keot, Sut, Ahom, Chutia etc.

Keyword: Ethno medicinal plants, Folklore, Traditional knowledge and IPR (Intellectual Property rights)

INTRODUCTION:

The study area is rich in biodiversity with its different verities of flora and fauna. In the villages, there are some old medicine men who has been practicing the tradition of ethno-medicine by using various kinds of plants to treatment of different diseases. Despite of modern allopathic medicine and treatment prescribed by the Doctors, such practices are still going on in the rural areas for treatment of various diseases.

The people of the area use traditional medicines for remedy of different diseases. There are two types of traditional medicine used by the people namely medicine prepared from enthno-medicinal plants and ethno-megico-religious practices. Here, I have discussed only the first categories, i.e., ethno-medicinal plants. The rural folk people gathered huge knowledge regarding the medicinal plants locally available in their localities and uses. Despite of lacking scientific knowledge and modern scientific equipments, they have been practicing the tradition since long back and they have a belief that several diseases have been cured under their treatment. The study is an attempt to document the local and botanical names of the plants along with which part of the plants are used for preparing the medicine.

In search of food and the ways to cope up successfully with human suffering, primitive man began to distinguish those plants suitable for nutritional purpose from others with definitive pharmacological action. This relationship had kept on growing between plants and man, and many plants came to be used as drugs. The growth of knowledge to cure disease continues at an accelerating pace, and a number of new plant-derived drugs have increased likewise. Herbal medicine is currently experiencing a revival in the world, along with other complementary therapies such as traditional Chinese Medicines, Osteopathy and Homeopathy (Shinwari and Gilani, 2003).

Folklore is the knowledge of the people which is traditionally handed down from one generation to the next by

the words of mouth. Since long back, folk people has been traditionally practicing various medicines by using different kinds of locally available plants and herbs for treatment of different kinds of diseases. It is an urgent need for identification, documentation and preservation of such medicinal plants without which the big drug companies and other medicine preparing companies may be borrowed the technique and chemical composition of the plants for preparing various drugs without proper authorization of the communities. So, there is a big question of IPR protection of the medicinal plant in this regard.

METHODOLOGY

Both the primary and secondary sources have been applied for data collection. The local names of the plants along with the process of preparing the medicine and dose prescribe for the patients are collected from the informants of the villages such the healers and experienced elderly persons who have been associated with such practices. The botanical names and family of the plants along with some relevant data are collected from secondary sources. The field work was done among seven villages of my study areas. The names of the villages are Burha Burhi Gaon, Baligaon, Baralapar, Naharani, Thakurdalani, Kamalpur and Jarabari. According to the informants due to deforestation and some other environmental hazards, numbers of such medicinal plants are gradually decreasing, so it becomes very difficult to search such plants in their local forests easily.

RESULTS

This study recorded 47 nos of plant species used by the medicine men for preparing traditional medicine by applying indigenous knowledge. Most of the medicine men were rural folk who had not elaborate scientific knowledge in this regard. They generally used leaves, stems, roots, barks and fruits of the medicinal plants for preparing the medicine. In terms of habit, there are 50% species of herbs, 20% species of trees, 15% species of shrubs, 15% climbers and 10%

Karuna Kanta Kakati, "ETHNO - MEDICINE, FOLKLORE AND IPR: A STUDY AMONG SEVEN VILLAGES OF LAKHIMPUR DISTRICT, ASSAM "Indian Streams Research Journal Vol-3, Issue-7 (Aug 2013): Online & Print

epiphytes. In this study, most of the parts of the plants used in preparation of herbal medicine are leaves (50 %), roots (10%), fruits (24%), Rhizome (4%), flower (4%) and whole plant (14%). It is also observed that most medicine men prepared the medicines by using leaves of the ethnomedicinal plants.

Table –I Communities of inhabits in the villages where field work has been done.

Name of the villages Communities inhabits

Burha Burhi village
 Baligaon
 Kalita, Koch, Keot and Kaibarta
 Baralapar
 Kalita, Koch and Keot
 Naharani
 Kalita, Koch, Keot and Ahom
 Thakurdalani
 Kalita, Koch, Keot and Ahom
 Kamalpur
 Kalita, Koch and Keot
 Jarabari
 Kalita, Koch, Keot and Deuris

Table-II includes local names, botanical names, family, parts used and their uses of the medicinal plants

Sl.no	Assamese	Botanical name	Family	Parts used	Uses
1.	Ada	Zingiabar officinale L.	Zingiberaceae	Rhizome	2 spoonfuls Juice of the rhizome is used for 2 times daily for 3 days to get relief from cough.
2.	Alu	Solanum tubersum L.	Solanaceae	Tuber	The paste of the bulb locally applied to cure burn.
3.	Amora	Spondias	Anacardiaceae	Fruit	Ripe fruit or curry is taken to cure dasentery.
4.	Amlakhi	Phyllanthus emblica L.	Phyllanthaceae	Fruit	Fruit is eaten to cure acidity. Power of dried fruit is mixed with the powder of dried fruit of Silikha and Bhomora which is used to treat digestion, acidity and constipation.
5.	Amita	Carica papaya L.	Caricaceae	Fruit	Ripe fruit and boiled tender fruit is taken to cure constipation and latex is applied 2 times daily for 7 days to cure ringworm.
6.	Athiakal	Musa balbisiana Colla	Musaceae	Fruit and inflorescence	One ripe fruit two times daily for 2 days is eaten to cure dysentery.
7.	Bakul	Mimus opselengi		Fruit and bark	200 gm bark is boiled in 500 ml water and the luke warm water is taken in mouth 5 to 10 minutes for 2 times daily for 2 days to cure pyorrhea. One ripe fruit is chewed for 3- 5 times daily for 2 days to set loose teeth.
8.	Bel	Aegle marmelos (L) Corrêa	Rutacene	Fruit, leaf and root	Ripe fruit is taken to cure constipation, dried tender fruit is boiled in 500ml of water and the water is drunk once in a day for 2 days to cure dysentery. Paste of leaves is applied in chest to get ride of pain, 5 cm root is taken once in a day for 2-3 days to control palpitation of heart.
9.	Bhedailata	Paderia scandens(Lour.) Merr.	Rubiaceae	Leaf	Curry of leaves is taken in alternative days for 1 month to treat chronic dysentery, joint pain, piles and sluggish of liver. The curry is also taken to improve of the iron composition in the blood.
10.	Bhomora	Terminalia belerica (Gaertn.) Roxb.	Combretaceae	Fruit	1-5 gm of powder of the dried fruit is taken daily upto 30 days to cure constipation, cough, gastric, precarious hair, soar throat, vomiting and worm.

11.	Bisalyakarani	Eupatorium triplinerve Vah	Asteraceae	Leaf	Paste is applied locally to treat cut and burn.
12.	Brahmi	Bacopa monnieri L. Pennell	Plantaginaceae	Whole plant	Juice of the plant is used to cure cough, epilepsy and nervous debility. It is also used to increase memory power.
13	Chalkunwari	Aloe vera (L_) Burm.f.	Xanthorrhoeaceae	Whole plant except root	Juice extracted from the plant is taken 2 teaspoonful twice daily for 3 days to cure acidity, 2 teaspoonful twice daily for 10-15 days to control high blood pressure and cure piles, 2 teaspoonful twice daily for 3 days to cure irregular menstruation.
14	Changoi tenga	Oxalic cornicalata L.	Oxalidaceae	Whole plant	2 teaspoonful juice extracted from the plant is used 2 times daily for 3 days to cure blood dysentery and prolepses of rectum.
15	Chirata	Swertia chirata (Wall.) C. B. Clarke	Gentianaceae	Leaf	Half of teaspoon extracted from soaked leaves in water is used twice daily for 2 days to control worm infecting intestine of the children.
16	Dhatura	Datura fastusa L.	Solanaceae	Leaf and root	Paste of leaves is applied in hair one time daily for 2 days to get ride of lice.
17	Doron	Leucus linifolia spreng.	Lamiaceae	Leaf	Paste of leaves is eaten to treat worm, juice extracted from leaves is eaten to cure cough and respiratory problem.
18	Dubari ban	Cynodon dactylon (L.) Pers	Poaceae	Whole plant	Paste of the plant is applied to the effected part to stop bleeding from cut and also used to cure boil and skin diseases.
19	Haladhi	Curcuma domestica Valeton	Zingiberaceae	Rhyzome	Power of dried haladhi is added to lime and applied locally to set dislocated bone and rejoining of broken bone. Paste of rhizome is eaten to cure cough gout and worm.
20	Joba	Hibiscus rosa- sinensis L.	Malvaceae	Flower and leaf	Juice extracted from flower and leaf is taken to cure cat mania, excessive bleeding during menstruation, gonorrhea, menonligia, precarious hair and strangery.
21	Jarmani ban	Eichhornia crassipes (Mart.) Solms	<u>Pontederiaceae</u>	Leaf	Leaves are mashed and applied to sooth cut and bruises.
22	Jetuka	Lawsonia inermis Linn.	Lythracea	Leaf	Paste of leaves is applied on nails to treat painful inflammation in the fingers and toes under the nails.
23	Purakal/ Kachkal	Musa sapientum L.	Musaceae	Fruit	Boiled or curry of the fruit is taken to cure dysentery.
24	Kana simalu	Commelina benghalensis L.	Commelinaceae	Stem	Juice is extracted from the stem is locally applied to cure sty.
25	Kathal	Artocarpas integrifolia (Thunb.) Mer	Magnoliaceae	Latex of fruit	Latex of fruit is collected in a bamboo stick and applied on the affected part and then detached to remove bristles of hairy caterpillar.
26	Keheraj	Eclipta prostrata (L.) L.	Asteraceae	Leaf	Paste of leaves is applied locally to stop bleeding and cure cut.
27	kalakaasu	Colocasia asculenta (L.) Schott	Areceae	Stem	Juice extracted from stem is taken to cure goiter, night blinder, piles and tonsillitis.

28	Nilajiban	Mimora mudica	Fabaceae	Whole plant	Juice extracted from the
20	Nuajiban	Mimosa pudica L.	rabaceae	whole plant	plant is taken to cure acidity, dysentery, odor of sweat and piles.
29	Machandari	Houttuynia cordata Thunb.	<u>Saururaceae</u> .	Whole plant	Baked or curry of leaves is taken to blood dysentery.
30	Madhusoleng	Polygonum microcephalum D. Don	Polygonaceae	Leaf	Juice or curry of leaves is taken to treat dysentery.
31	Manimuni	Centella asiatica (L.) Urban	Mackinlayaceae	Whole plant	Paste of leaves is applied to cure pmple and skin diseases. Juice or curry of the plant is taken to treat acidity, blood dysentery, indigestion, epilepsy and distorted breast of women.
32	Matikaduri	Achyranthes sessilis (L.) Desf. ex Steud	Amaranthaceae	Leaf	Curry of leaves is taken to treat dysentery.
33	Narasingha	Murraya_koenigii (L.) Spreng.	Rutaceae	Leaf	Leave's juice or curry is taken to cure acidity, cough and dysentery.
34	Narji	Tagetes patula L.	Asteraceae	Leaf	Paste of leaves is locally applied to stop bleeding from cut and wound.
35	Pachatia	Vitex negundo L.	Verbenaceae	Leaf	Curry prepared from leaves is taken to cure muscle pain and paste of leaves is locally applied to cure bone pain.
36	Poduna	Mentha arvensis L.	Lamiaceae	Leaf	Paste of leaves is taken to treat indigestion and to stop vomiting.
37	Dupor tenga	Bryophyllum pinnatum (Lam.) Oken	Crassulaceae	Leaf	Juice of the leaves is eaten to cure acidity, gonorrhea and kidney stone.
38	Ponoru	Allium cepa L.	<u>Amaryllidaceae</u>	Bulk	Juice extracted from the bulk is locally applied to cure hair fall, goiter and pain of insect's bite. Juice is eaten to cure epilepsy.
39	Puroi	Basella rubra L.	Basellaceae	Leaf, stem	Juice or curry of leaves and tender stems is taken to cure elephantiasis, fever during pregnancy and pyorrhea.
40	Satamul	Asparagus racemosus Willd.	Asparagaceae	Root	Juice extracted from root is taken to cure acidity, cough, dysentery and indigestion.
41	Sewali	Nyctanthes arbor-tristis L.	Oleaceae	Flower, leaf	Curry prepared from fresh and dried flower is taken to treat acidity and worm; juice extracted from leaf to curre cough, distaste, fever, and sciatica.
42	Siju	Euphorbia neriifolia L.	Euphorbiaceae	Leaf	Juice extracted from leaf is taken to cure cough and whooping cough. Paste of leaves is locally applied to treat piles, ring worm and skin diseases.
43	Silikha	Terminalia chebula (Gaertn.) Retz	Combretaceae	Fruit	Powder of dried fruit is taken to treat acidity and constipation.
44	Sukloti	Pogostemon benghalensis (Burm.f.) Kuntze	Labiatae	Leaf	Curry of prepared from tender leaves is taken to treat dysentery and gastric. The curry is also served to the delivery women for quick recovery.
45	Thekera	Garcinia pedunculata Roxb.	Clusisaceae	Fruit	Pieces of dried fruit are soaked in water or curry prepared from it is taken to treat blood dysentery.
46	Tita Kerela	Momordica charantia L.	Cucurbitaceae	Fruit, Leaf	Curry of the fruit or leaves is taken to treat
47	Tulosi	Ocimum sanctum L.	Lamiaceae	Leaf	diabetes and worm. Juice extracted from the leaves is mixed with honey and taken 1 teaspoonful twice daily for 3-5 days to cure cough and fever

CONCLUSION

In the present investigation, 47 medicinal plant species used to treat different diseases like blood dysentery, cough, fever, acidity, worm, recovery of delivery women, indigestion, kidney stone, vomiting, pain, blood pressure, diabetes, night blinder, piles, tonsillitis, stop bleeding etc were reported. The use of these plants to treat various illnesses is still needed by the communities,

the poor socio-economic conditions, the because of high cost and a difficult access to allopathic medicines. Besides there is an intangible value which is the belief of the community people regarding their ethno medicinal plants. The majority of the reported species are wild. These demand an urgent attention to conserve such vital resources so as to optimize their use in the primary health care system and IPR should be protected for the concern community. Now a days, conservation of traditional knowledge is handicapped by a lot of factors related to modernization of the region and lack of interest in traditional healers. It is high time that we have proceeded to save the cultural heritage of the natives, by confirming the therapeutic value of the plants by scientific means. In this context, screening for active substances and testing their activities against different diseases and the conditions that cause the organisms to form is an interesting subject for a future study.

ACKNOWLEDGEMENT:

I am very much thankful to Prof. Kishore Bhattacharjee, HoD, Dept. of Folklore Research, Gauhati University for providing me the chance to work as a project assistant in the project entitled Community Intellectual Property Rights which is sponsored by the Ministry of Human Resource Development, Govt. of India. During field work, I have collected the local names of the plants as well as the uses of different parts of the plants for preparing various medicines. I am also thankful to the informants who have directly or indirectly help me to the entire process of data collection.

REFERENCES:

- 1.Bora & Boissya, 2002. Ethno-botany of Lower-Subansiri district (Nishi Tribe) of Arunachal Pradesh, India. [Ph. D. thesis, (Unpublished) G.U.]
- 2. Borthakur, S. K. 1976. Less known medicinal uses of plants among the tribes of Karbi along (Mikir Hills), Assam. Bull. Bot. Surv. India. 18: 166-!71.
- 3. Dorson, R.M, 1972. Folklore and Folklife : An Introduction, London, The University of Chicago Press.
- 4.Dutta, A. C. 1975. Dictionary of Economic and Medicinal Plants. Khelmati, Jorhat, Assam.
- 5.Hooker, J. D. 1872 97. The Flora of British India, Vol. I VII. Reede & Co London. 6.Jain, S. K. 1963, Tribal Studies in Indian Ethnobotany: less
- known uses of fifty common plants from the Madhya Pradesh Bull. Bot. Surv. India 5:223-26.
- 7.Jain, S. K. 1964 The role of a botanist in folk- lore research. Folklore 5: 145-150.
- 8.Jain, S. K. 1967. Ethnobotany: its scope and study. Bull Indian mus. 2 (1): 39-43.
 9.Kanjilal, U. N., Kanjilal, P. C., Bor, N. L. and Das, A. 1934 40,
- "Flora of Assam" Vol. I V. Avon Book Co., Delhi
 10. Schults, R. E. 1963. The widening panorama in medical botany.
- Rhodora 65 (762) :97-120

 11.Shinwari ZK, Gilani SS (2003). Sustainable harvest of
- medicinal plants at Bulashbar Nullah, Astore (Nothren Pakistan). J. Ethnopharmacol. 84: 289-298.
- 12. Wahab MA, Yousaf M, Hossain ME (2004). Some indigenous medicinal knowledge for treating jaundice in Chittagong hill tracts Bangladesh. Hamdard medicus XLVII (4): 55-58

Publish Research Article International Level Multidisciplinary Research Journal For All Subjects

Dear Sir/Mam,

We invite unpublished research paper. Summary of Research Project, Theses, Books and Books Review of publication, you will be pleased to know that our journals are

Associated and Indexed, India

- * International Scientific Journal Consortium Scientific
- * OPEN J-GATE

Associated and Indexed, USA

- Google Scholar
- EBSCO
- DOAJ
- Index Copernicus
- Publication Index
- Academic Journal Database
- Contemporary Research Index
- Academic Paper Databse
- Digital Journals Database
- Current Index to Scholarly Journals
- Elite Scientific Journal Archive
- Directory Of Academic Resources
- Scholar Journal Index
- Recent Science Index
- Scientific Resources Database

Indian Streams Research Journal 258/34 Raviwar Peth Solapur-413005,Maharashtra Contact-9595359435 E-Mail-ayisrj@yahoo.in/ayisrj2011@gmail.com Website: www.isrj.net