

Full Length Research Paper

Sacred groves and sacred plants of the Dimasas of North Cachar Hills of Northeast India

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The present paper deals with the rediscovery of 12 sacred groves, known as Dikhos, preserved by the Dimasa community of North Cachar Hills district recently renamed as Dima Hasao district of Assam, India. Located strategically, these sacred groves provide several important ecological services to the people of the district. In addition to the sacred groves the plants considered to be sacred by them are also included. Out of the 34 plant species considered to be sacred by the Dimasas, 13 species are related to worshipping, 21 species involved in naming of areas/villages and eight species are associated with the naming of the Clans (Sengphong that is, male clans and Jaddi/Zaluk that is, female clans). However, some of the species/rice landraces have been associated with more than one ways. The Dimasas, also known as Dimasa Kacharies, constitute the largest ethnic group in North Cachar Hills and linguistically belongs to the Tibeto-Burman group.

Key words: Phytoresources, sacred groves, sacred plants, Dimasas, North Cachar Hills, India.

INTRODUCTION

Traditional ecological knowledge is concerned with the dynamic relationships between traditional societies and landscapes, ecosystems, populations and between individual species. This knowledge system has significance in three broad ways: economical, ecological/social and ethical. The ethical aspect deals with the cultural, spiritual and religious belief systems centered around the concept of the sacred species, sacred groves and sacred landscapes, etc. (Ramakrisnan, 2001). North Cachar (N. C.) Hills district of Assam, recently renamed as Dima Hasao district, is one of the two hill district of Assam in North-eastern India. The district is located in between 25°58' to 25°47' N latitudes and 92°27' to 93°43' E longitudes with an area of 4,890 sq. km. Topographically, the altitude of the district ranges from 140 to 1866 m above msl. The district has a total population of 2,13,529 with a density of 44 per sq. km. (Anonymous, 2005). More than 70% of the population of the district belongs to different ethnic groups viz.: Dimasas, Jeme Nagas, Hmars, Kukis, Karbis,

Biates, Jaintias (Pnar), Hrangkhawls, Khelmas, Vaipheis, etc. Acculturation and other obvious reasons over the time, it has become increasingly difficult to identify and locate some of the sacred groves of the Dimasas. With this backdrop, an attempt has been made to rediscover and document those sacred groves and also the plants revered as sacred by the Dimasas inhabiting in the district.

THE DIMASAS

The Dimasas or Dimasa Kacharies, constitute the largest ethnic group in N. C. Hills district. Linguistically, they belong to the Tibeto- Burman group. The term 'Dimasa' literally means the son of a big river; *Di* means water, *Ma* means big and *Sa* means son. As the Brahmaputra is the biggest and longest river in Assam, it may be presumed that the Dimasas considered themselves to be the descendants of the river Brahmaputra (Barpujari, 1997). The total population of the Dimasas in N. C. Hills district is 64,881 and they constitute 32.90% of total population of the district (Anonymous, 2005).

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Social life

The Dimasas follow the patriarchal system. However, parallel clans of both male and female are also recognised in the Dimasa society and as such there are 40 male clans or Sengphong and 42 female clans or Jaddi / Zaluk. Both the clans are exogamous and marriage within the same clan is a social taboo (Guha 1912). The paternal property is inherited by sons only after the death of the father and the maternal property is inherited by the daughters only (Nunisa, 2006).

Religious life

The Dimasas believe in Hinduism with an admixture of animism. They believe that different parts of their habitations are reign by six ancestral gods or Madai viz., Sibrai, Alu Raja, Naikhu Raja, Wa Raja, Ganiyang- Braiyung and Hamiadao and these gods have their full control under their jurisdiction. Thus the concept of area-god has developed amongst them. The area-gods are considered to have their adobes in different forest patches, known as Dikhos (sacred groves), of the Dimasa land. The shrines of these gods are not housed in any temple but installed and worshiped inside the *Dikhos*. In the past there were 12 Dikhos and the Dimasas believed that gods and goddesses residing in a particular Dikho protect the people of that area and control their destiny. These Dikhos are very important as these forest patches are conserved through the community participation for ethical reasons (Lalsim, 2005).

A number of publications on different aspects of sacred groves of different parts of northeast India have appeared during the last few decades and these include, ethno medicinal plants in the sacred groves of Manipur (Ashalata et al., 2005), plants in religio-cultural beliefs of the Tai Khamtis of Assam, India (Gogoi and Borthakur 1991), tribal man in the humid tropics of the north-east India (Ramakrisnan, 1985), socio-cultural studies of the sacred groves at Cherrapunjee and adjoining areas in north-eastern India (Ramakrisnan and Kiewtam, 1989), ethno botanical study on indigenous people and forests from Nagaland, northeast India (Rao, 1996) and relevance of ethno forestry in Arunachal Pradesh, India (Shukla and Haridarshan 1996).

Publications from other parts of the Indian sub-continent includes traditional worshiping plants (Bhatla et al., 1984), tribal dependence and tradition on forests (Deeney and Fernandes, 1992), role of tribals in preservation of sacred forests (Godbole, 1996), tribal clans in central India and their role in conservation (Jain, 1988), ethnobotanical aspects of tropical ecosystems (Jain, 1989), socio-cultural and environmental studies on religious forest patches among Mahadeo Koli tribal localities from south India (Kulkarni et al., 1996), cultural heritage of sacred groves (Nipunage et al., 1992), conserving the sacred forest for biodiversity management

(Ramakrisnan et al., 1998), sacred groves for *in-situ* conservation (Vartak, 1996), studies on the role of believes and folklores on sacred groves along Maharastra and Goa (Vartak and Gadgil, 1997) and treasure trove of medicinal plants in the sacred groves of tribal areas of Western Ghats (Vartak et al., 1987).

Again, indigenous views of land and environment (Davis, 1993), sacred mountain forests and biodiversity (Ramakrisnan, 2000a), ethnobotanical value and conservation of sacred groves of the Kpaamende in Sierra Leone (Lebbie and Guries, 1995), sacred forests in Sierra Nevada de Santa Marta Columbia (Rodriguez-Navarro, 2000) and linking protected area management with local people communities (Wells and Brandon 1992), etc. publications from other parts of the world are taken into account as references.

MATERIALS AND METHODS

An extensive field work was carried out during 2007 to 2009 to study encompassing on the documentation plant resources and traditional knowledge pertaining to these resources from N. C. Hills of Assam. Plant samples bearing a total of 861 field numbers were collected and their traditional uses by the ethnic people of the area were recorded. Identification of the locations and working out of the area cover of the sacred groves which became indistinguishable from the surrounding forests and also documentation of the plants considered to be sacred by the Dimasas was also part of the study.

The collected plant materials were made into herbarium specimens following standard herbarium techniques suggested by Jain and Rao (1977). The specimens were identified with the help of local floras (Chauhan et al., 1996; Deb, 1981; Kanjilal et al., 1934 to 1940, Singh et al., 2002, Rowntree, 1953) and/or with the help of herbarium specimens deposited in the Kanjilal Herbarium, Botanical Survey of India, Shillong (ASSAM). The specimens on which this study is based have been deposited in the Herbarium of Botany Department, Gauhati University (GUBH).

Germplasms of the rice landraces used in naming the clan names were collected and their passport data have been prepared following the standard procedure/guidelines (Sharma, 2000). All the collected rice germplasm accessions were already submitted to NBPGR Regional Station, Meghalaya-793103, India for conservation. Information regarding the field/collection number, date and place, botanical name, vernacular name(s), biological status (whether wild or cultivated) and traditional uses of the recorded plant species considered as sacred by the Dimasas were also provided.

RESULTS

The present communication is an outcome of a comprehensive study on plant resources and traditional knowledge pertaining to these resources of N. C. Hills of Assam which includes the brief descriptions of 12 Dikhos (sacred groves) of the Dimasa community in the district and a total of 34 species considered to be sacred by them were been recorded. Out of which, 13 species are related to worshiping, 21 species involved in naming of areas/villages and eight species are associated with the naming of the clans. However, three species viz., *Areca*

catechu, *Dendrocalamus giganteus* and *Melocanna baccifera* are associated both with worshipping and naming of the areas/villages. Similarly, *Artocarpus chama* is involved both in the naming a village and a male clan. *Emblica officinalis* is associated with worshipping, naming of a village and a female clan. *Oryza sativa* is associated with the naming of three villages, one male clan and 27 female clans.

Sacred groves of the Dimasas

The Sacred Groves have been playing an important role in conservation of biodiversity as these forest areas are experiencing least or without human interferences like *Jhum* cultivation, cutting of trees for fuel and/or for timber, etc. Therefore, these forests are usually rich in biodiversity which have been conserved through community participation.

In Dimasa society an administrative hierarchy has been followed from highest ranked priest to the common people of different clans. For each of the 12 Dikhos there is one priest or Jonthai to perform and look after the religious rites of the Dikho. The authority of a Jonthai is undisputed and he performs his duties as per the instruction of a head priest or Jonthaima of all the Dikhos. There is also a principal priest or chief priest, known as Gisia, at the top of the hierarchy. The person selected for Jonthaihip is baptised by the Gisia by sprinkling holy water or Dithar. The religious hierarchal structure among the Dimasas is as follows:

GISIA (Son of the God) → JONTHAIMA (Head priest) → BAROWA (Assistant priest) → JONTHAI (Sub-clan wise 12 Jonthais) → GENERAL VILLAGE PEOPLE.

The following are the brief description of the 12 sacred groves of the Dimasas from North Cachar Hills District of Assam, India with their locations shown in the map (Figure 1).

- i) Aludikho: There are two Aludikhos maintained by the Dimasas; one at Mahurbra village near Dihangi at the confluence of river Mahur and Diyung and the other one at Thongikhrow/Wajaw village in a remote place of Maibang area. The extents of these two Dikhos are 2.46 and 2.28 acres, respectively. For the convenience of the people, worshipping their own clan gods in nearby Dikho is the reason behind the maintenance of two similar Dikhos in two different parts of the district.
- ii) Longmailaidikho: Located at Moti village of the Mahur area and has an area of 2.72 acres.
- iii) Longmailumdikho: Located at Dijowahapa village of Mahur area with an area of 2.16 acres.
- iv) Manjadikho: Located at Mailu village in Langting area and its extent is 2.83 acres.
- v) Damadidikho/Riaodikho: Located in between Sampha-

ridisa and Gaijon/Nogdi Daulagupu village, at the confluence of river Hagong and Diyung, that is, Abungbra. It is the biggest of all the 12 Dikhos and spread over area 3.67 acres. The five clan gods viz., Naikuraja, Nobaraia, Waraja, Shivarai and Kampadi are worshiped here (Figures 2A, B and C).

vi) Hamridikho: Located at Palaipa/Daudungkhor village in Thaijuwari area at the confluence of river Langting and Diyung. This Dikho covers an area of 1.86 acres.

vii) Misimdikho: Located at Gerem basti village in Mahur area has an area of 1.71 acres.

viii) Baiglaidikho/Baigiadikho: Located at a remote village Bongkhai in Khepre area near Nagaland border with an area of 2.82 acres.

ix) Waibradaikho: Located at Hajageder village of Langting area and is considered as Daikhongmahi Deng (means Purest Dikho) among all the Dikhos of the Dimasas. This Dikho has an area of 2.65 acres and only recently rediscovered it by the community after remaining unknown for quite a long time.

x) Mongrangdikho/Semkhordikho: Located at the Semkhor village considered to be the original Dikho of the Semsas, a male clan of the Dimasas with an area of 2.89 acres.

xi) Mongrangdikho: Located at Delen bathari near Banjikhalu village of Maibang area (12kms. from Maibang town) and at the confluence of river Dugu and Delen that is, Dugubra. This Dikho has an area of 1.85 acres and is for the Semsas dwelling outside the Semkhor village for worshipping their own clan god.

xii) Ronchandidikho (Bamin): During the Kachari reign this Dikho was originally located at Dajdi village in eastern Maibang area (side of Dhansiri River), but when the capital of the Kachari Kingdom was shifted to Khaspur (now in Cachar District of Assam), a new *Dikho* was demarcated there. However, nowadays, at Khaspur only the monuments are there without any Gisia and Jonthais and all the traditional rites are performed at the *Dikho* located at Dajdi village. This Dikho has an area of 3.10 acres.

Sacred plants of the Dimasas

The traditional life style of the Dimasas of N.C. Hills has been strongly influenced by the natural resources available in and around their habitations. Apart from the food and other material needs, utilization and management of the plant resources have been closely associated with culture and tradition of the Dimasas. The identity of an area/village is often associated with plant resource either available in the area/village or importance to the people.

Accordingly, the area/village has been named after the plant resource. All the plants used for worshipping, naming of an area/village and clans are held sacred by the Dimasas.

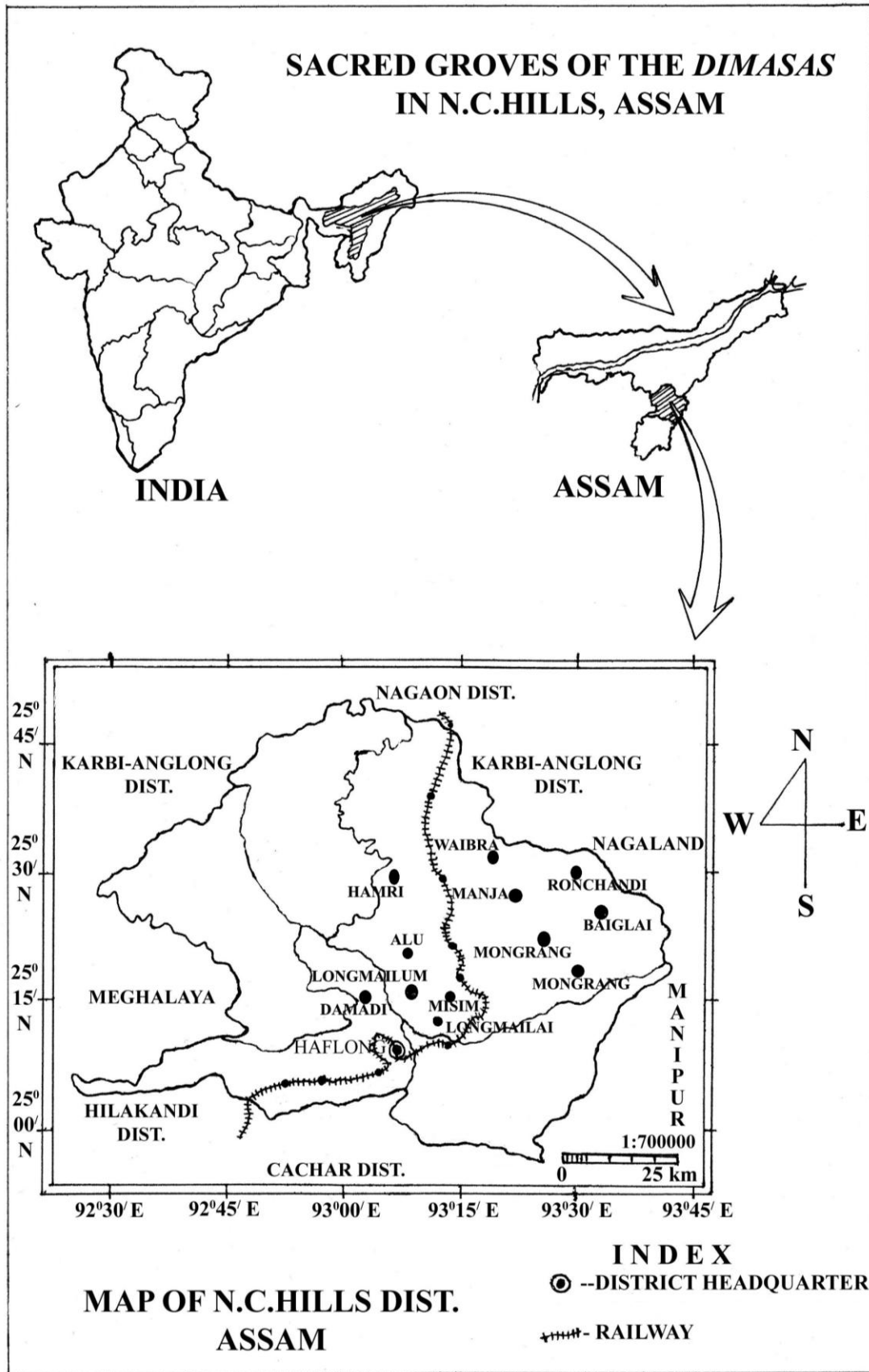


Figure 1. Map of N. C. Hills showing Dikhos of the Dimasas (Location not to the scale).



Figure 2. A) The largest sacred grove Damadidikho. B) Local village men showing the name of the gods worshiped in Damadidikho. C) Jonthai, the traditional priest using *Melocanna buccifera* culm and *Musa* sp. leaf in worshipping.

Sacred plant used for worshipping

Present study reveals a total of 13 plant species considered as sacred and associated with worshipping by the Dimasas of the area are enumerated (Table 1).

Plant used for naming of the areas/villages and clans

Naming of the areas/villages derived from plant(s) name: Names of 23 areas/villages which have been derived from plant names in *Dimasa* dialect of 21 species are recorded from the study area (Table 2). However, three villages viz., Maibang, Mailu and Mailong disha

were derived from the names of three different landraces of rice (*Oryza sativa*).

Naming of clans derived from plant(s) name: Out of the existing 82 male and female clans of the Dimasas, a total of 34 clans have been named on the basis of the names of the plants in Dimasa dialect. A total of seven plant species were recorded to be associated with the naming of the clans.

a) The names of five male clans that is, Sengphong were based on the names of one landrace of *Oryza sativa* and four other plant species which has been provided in the Table 3.

Table 1. Sacred plants associated with worshipping of the Dimasas.

Botanical name, family; collection no.; date; locality	Vernacular name	Biological status	Use
<i>Abroma augusta</i> L. [Sterculiaceae]; PM-779; 07-12-2009; Sampharidisha	Bon naga (DI), Dieng-tyrkhum (PN)	WI	A twig is used during sacrifice of buffalos in <i>Maimuhtarba</i> ceremony.
<i>Areca catechu</i> L. [Arecaceae]; PM-780; 12-01-2009; Dibarai	Gowai (DI), Kuvara (HM), Tegut chi (ZE)	Cv	Pair of fresh fruits and <i>Piper wallichii</i> (Mithibon-DI) leaves is indispensable item in all religious ceremonies.
<i>Bambusa tulda</i> Roxb. [Poaceae]; PM-781; 07-12-2009; Sampharidisha	Washi (DI), Hebeu (ZE)	WI	Leaves and culms are used in worshipping.
<i>Bauhinia scandens</i> L. [Caesalpiniaceae]; PM-782; 12-01-2009; Dikrik	Bandar jakhla (DI), Jongli-lon (HM)	WI	The plant is considered to be sacred.
<i>Celosia cristata</i> L. [Amaranthaceae]; PM-783; 07-12-2009; Sampharidisha	Khemsajao (DI)	Cv	Twig with inflorescences used in a religious ceremony called <i>Dakinsa</i> .
<i>Dendrocalamus giganteus</i> Munro. [Poaceae]; PM-784; 20-12-2007; Boro Waphu	Waphu (DI)	WI	Leaves and culms are used in worshipping.
<i>Emblica officinalis</i> Gaertn. [Euphorbiaceae]; PM-785; 22-09-2008; Gurubari	Hamlaithai (DI), Gamso-lu (MI), Jauka chi (ZE)	SWI	The tree is worshiped by the father of a sick baby for early recovery and the parent concerned refrain from cutting the plant in rest of their lifetime.
<i>Entada pursaetha</i> DC. [Mimosaceae]; PM-786; 21-07-2007; Longma-I	Suthai (DI), Poi (HM)	WI	i. Seed paste mixed with black mustard seeds are smeared over the dead bodies before cremation. ii. Dried fruits of the plant are used as decorative item just above the front door of the main house.
<i>Melocanna baccifera</i> (Roxb.) Kurz. syn. <i>Melocanna bambusoides</i> Trin. [Poaceae]; PM-787; 21-12-2007; Longma-III	Wa-thi (DI)	WI	i. Culms are used for water purification rituals especially during <i>Misengba</i> ceremony. ii. Offering of rice beer (<i>Judima</i>) in cups made from the culms to the deities in various religious ceremonies is a common practice.
<i>Musa velutina</i> Wendl. [Musaceae]; PM-788; 21-12-2007; Longma-III	Thailik/Laishrimdi (DI), Gam Nachang vui (HM/MI), Gumjui (ZE)	WI	Leaves and leaf sheaths are used in religious ceremonies as platters.
<i>Piper wallichii</i> (Miq) Hand. Mazz. [Piperaceae]; PM-789; 12-01-2009; Dibarai	Mithibon (DI), Kobirang (HR)	WI	Pair of both fresh leaves and <i>Areca catechu</i> fruits (Gowai-DI) is indispensable item in all the religious ceremonies.
<i>Smilax perfoliata</i> Bl. [Smilacaceae]; PM-790; 21-12-2007; Longma-III	Shidigubru (DI), Junse-pi (HR),	WI	It is believed that children get cured of bed-wetting if lunch and dinner are served using the fresh leaves of this plant as plate.

Table 1. Continued

<i>Streblus asper</i> Lour. [Moraceae]; PM-791; 07-12-2009; Sampharidisha	Khande (DI)	WI	The tree is believed to be the abode of the evil spirits. When a person remains sick for long time the village priest (<i>Jonthai</i>) worships below the tree for his early recovery.
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Table 2. Naming of the *Dimasa* areas/ villages derived from plant(s) name.

Collection no.	Name of village	Vernacular names of the plants	Botanical name
PM-792	Boro waphu	Wa-Bamboo; guphu-white	<i>Dendrocalamus giganteus</i> Munro. [Poaceae]
PM-793	Boro washilling	Wa-Bamboo; shilling-garden	<i>Dendrocalamus hamiltonii</i> Nees et Arn. ex Munro [Poaceae]
PM-794	Choto waphu	Wa-Bamboo; guphu-white	<i>Bambusa cacharensis</i> R. Mazumdar [Poaceae]
PM-795	Choto washilling	Wa-Bamboo; shilling-garden	<i>Dendrocalamus hookeri</i> Munro [Poaceae]
PM-796	Dihamlai	Di-water; Hamlai-Emli	<i>Emblica officinalis</i> Gaertn. [Euphorbiaceae]
PM-797	Galaphang	Gala-Bitter gourd; Phang-Plant	<i>Momordica charantia</i> var. <i>muricata</i> (Willd.) H.L. Chakravarty [Cucurbitaceae]
PM-798	Gowaidisha	Gowai-Areca nut; Disha-stream	<i>Areca catechu</i> L. [Arecaceae]
PM-799	Gurubari	Guru-Sugarcane; Bari-cultivation field	<i>Saccharum officinarum</i> L. [Poaceae]
PM-800	Jaramdisha	Jaram-Artocarpus plant; Disha-stream	<i>Artocarpus chama</i> Buch.-Ham. [Moraceae]
PM-801	Maibang	Mai- paddy; bang-large quantity	<i>Oryza sativa</i> L. [Poaceae]
PM-802	Mailong disha	Mai- paddy; Disha-stream	<i>Oryza sativa</i> L. [Poaceae]
PM-803	Mailu	Mai- paddy	<i>Oryza sativa</i> L. [Poaceae]
PM-804	Michikur	Michi-Finger millet	<i>Setaria italica</i> (L.) Beauv. [Poaceae]
PM-805	Muolhoi	Muol-Lichi plant; hoi-garden (In Hmar language)	<i>Litchi chinensis</i> Sonner. [Sapindaceae]
PM-806	Railing-hadi	Rai-Cane; Hadi-wet land paddy	<i>Daemonorops jenkinsianus</i> (Griff.) Mart. [Arecaceae]
PM-807	Sampharidisha	Samphariphang-Michelia sp. plant ; Disha-stream	<i>Michelia champaca</i> L. [Magnoliaceae]
PM-808	Thaijuphangwari	Thaiju-Mango; Wari-lake	<i>Mangifera indica</i> L. [Anacardiaceae]
PM-809	Tentriphang-hading	Tentriphang-Tamarind plant; Hading- Hill	<i>Tamarindus indica</i> L. [Caesalpiniaceae]
PM-810	Wadrengh disha	Wadrengh-a bamboo species; Disha-stream	<i>Phyllostachys mannii</i> Gamble [Poaceae]
PM-811	Wajao	Wa-Bamboo; Gajao-Red	<i>Dinochloa maclellandii</i> (Munro) Kurz [Poaceae]
PM-812	Washu bil	Wa-Bamboo; Shu-thorn	<i>Chimonobambusa callosa</i> (Munro) Nakai [Poaceae]
PM-813	Wathi disha	Wathi-Bamboo	<i>Melocanna baccifera</i> (Roxb.) Kurz. syn. <i>Melocanna bambusoides</i> Trin. [Poaceae]
PM-814	Wayung disha	Wayung-Bamboo; Disha-stream	<i>Melocalamus compactiflorus</i> (Kurz) Benth. [Poaceae]

Table 3. Plants associated with the naming of the Dimasa male clans.

Clan no.	Coll. no.	Name of male clan	Vernacular names of the plants	Botanical name
6.	PM-815	Mitherphangsa	Mither-the plant; Phang-plant; Sa- Son	<i>Actephila excelsa</i> Mull.-Arg. [Euphorbiaceae]
32.	PM-816	Maibangsa	Mai -Rice; Bang-large quantity; Sa -son	<i>Oryza sativa</i> L. [Poaceae]
34.	PM-817	Sarongphangsa	Sarong- the plant; homa-spine on the fruit epicarp; phang-tree; Sa-son	<i>Castanopsis indicus</i> (Roxb.) A. DC. [Fagaceae]
38.	PM-818	Jarambosa	Jaram -the plant and Sa-son	<i>Artocarpus chama</i> Buch. Ham. [Moraceae]
39.	PM-819	Lafthaisa	Lafthai-the plant; Sa-son	<i>Lagermaria siceraria</i> (Molina) Standley [Cucurbitaceae]

b). Altogether the names of the 29 female clans that is, Jaddi/Zaluk have been derived either from the specific plant or plant product deposited to the treasury of the king in the past. Except Hamlai gimindi and Kimbersi, rests of the 27 names of female clans were derived from the names in Dimasa dialect of different landraces *Oryza sativa*. Often the same clan name has different matrilineal origin. Different rice landraces having different local names in *Dimasa* dialect used for naming the clans have been provided here (Table 4).

Abbreviations used for indicating

a) Ethnic communities: (DI)-*Dimasa*, (HM)-*Hmar*, (HR)-*Hrangkhol*, (MI)-*Mizo*, (PN)-*Pnar (Jaintia)* and (ZE)-*Zeme Naga*.

b) Biological status: Cv-cultivar, SWI-semi-wild and WI-wild.

DISCUSSION

The present study reveals that the recorded plants are related to the socio-cultural life of the Dimasas of North Cachar Hills of Northeast India as these plants are associated to the traditional worshipping, naming of areas/villages as well as the male and female clans. Considering these plant resources as sacred plants and protecting them in their locality by the Dimasas are contributing towards the biodiversity conservation along with the ethical aspects of the community.

The presence of a number of primeval forest patches or sacred groves preserved by the Dimasas in North Cachar Hills district of Assam through various religious beliefs and social sanctions attached to them is significant as maintenance is known so far from the state of Meghalaya

in northeastern India (Hajra, 1975; Khiewtam and Ramakrishnan, 1989; Tiwari et al., 1995,1998).

Sacred groves represent the dense vegetation of an area, and in most cases the vegetation formed a sharp boundary with the adjacent degraded forests. From the locations of the sacred groves maintained by the Dimasas at the catchment areas of major rivers or rivulet or at the point of origin of perennial streams, it is evident that the sacred groves provide such important ecosystem services as conserving soil, protecting water sources and catchment areas and helping to maintain downstream water quality.

The studies of sacred groves in other parts of India show that such forests are repository of biodiversity, safe sites for reproduction of a variety of floral and faunal resources, and last refuge of a number of rare, endangered and threatened plants (Bor, 1942a, 1942b; Haridasan and Rao, 1985, 1987; Darlong, 1995; Vartak and Gadgil, 1997).

Considering the conversational, cultural and aesthetic importance, further studies on the sacred groves of the Dimasas have been taken up since 2009 to assess the biodiversity status and value. The intimate association of the Dimasas with the nature is not only confined to the use of natural resources and conservation of forests through belief alone but also provide sanctions to a number of individual plants by incorporating in their religious rites, social customs or even as part of their social structures as names of villages or names of clans.

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Table 4. Plants associated with the naming of the *Dimasa* female clans:

Clan no.	Collection no.; IC no.	Name of female clans	Vernacular names/landraces of plants	Botanical name
2.	PM-820 ; IC no.560793	Banglaima gedeba fashaidi	Banglaima-A Jhum cultivar rice landrace Banglaisha; Gedeba-large.	<i>Oryza sativa</i> L. [Poaceae]
4.	PM-821; IC no. 560767	Mairong fashidi kasiba	Mairong-Rice kernel of Maijau-di-gajao (Red husk colour); kasiba-small.	<i>Oryza sativa</i> L. [Poaceae]
5.	PM-822; IC no.560797	Mairong gedeba-sam desagao	Mairong-Rice kernel of Maiju-walao-gidiba (with sticky and mild aroma); Gedeba-large; desagao-leader.	<i>Oryza sativa</i> L. [Poaceae]
7.	PM-823; IC no.560794	Mairong gedeba	Mairong-Rice kernel of Maijau-di-gidiba (tall plant with long panicle); Gedeba-large.	<i>Oryza sativa</i> L. [Poaceae]
8.	PM-824	Hamlai gimindi	Hamlai-the plant; gimindi-ripe	<i>Emblica officinalis</i> Gaertn. [Euphorbiaceae]
9.	PM-825; IC no.560794	Mairong gedeba	Mairong- Rice kernel of Maijau-di-gidiba (tall plant with long panicle); Gedeba-large.	<i>Oryza sativa</i> L. [Poaceae]
11.	PM-826	Mairong praisong	Mairong-Rice kernel	<i>Oryza sativa</i> L. [Poaceae]
13.	PM-827; IC no.560793	Banglaima kasiba	Banglaima-A Jhum cultivar rice landrace Banglaisha; kasiba-small.	<i>Oryza sativa</i> L. [Poaceae]
14.	PM-828; IC no.560794	Mairong gedeba	Mairong- Rice kernel of Maijau-di-gidiba (tall plant with long panicle); Gedeba-large.	<i>Oryza sativa</i> L. [Poaceae]
16.	PM-829; IC no.560794	Mairong gedeba	Mairong- Rice kernel of Maijau-di-gidiba (tall plant with long panicle); Gedeba-large.	<i>Oryza sativa</i> L. [Poaceae]
18.	PM-830	Mairong daoga jairungdi	Mairong-Rice kernel; daoga Jairungdi- rice cleaning expert.	<i>Oryza sativa</i> L. [Poaceae]
19.	PM-831; IC no.560797	Mairongma gedeba	Mairongma- Rice kernel of Maiju-walao-gidiba (sticky and with mild aroma); Gedeba- large.	<i>Oryza sativa</i> L. [Poaceae]
20.	PM-832; IC no.560794	Mairong gedeba	Mairong- Rice kernel of Maijau-di-gidiba (tall plant with long panicle); Gedeba-large.	<i>Oryza sativa</i> L. [Poaceae]

Table 4. Continued.

21.	PM-833; IC no. 560803	Mairong kasiba	Mairong-Rice kernel of Maiyen-maiju (a wet cultivar); kasiba-small.	<i>Oryza sativa</i> L. [Poaceae]
22.	PM-834; IC no.560797	Mairongma gedeba	Mairongma-large Rice kernel of Maiju-walao-gidiba (sticky and mild with aroma); Gedeba-large.	<i>Oryza sativa</i> L. [Poaceae]
23.	PM-835; IC no.560794	Mairong gedeba	Mairong- Rice kernel of Maijau-di-gidiba (with tall plant and long panicle); Gedeba-large.	<i>Oryza sativa</i> L. [Poaceae]
26.	PM-836; IC no.560793	Banglaima	Banglaima-A Jhum cultivar rice landrace Banglaisha.	<i>Oryza sativa</i> L. [Poaceae]
27.	PM-837; IC no.560804	Maireng	Maireng-Rice kernel of Dimri-maisa (a late variety).	<i>Oryza sativa</i> L. [Poaceae]
29.	PM-838; IC no. 560803	Mairong kasiba	Mairong-Rice kernel of Maiyen-maiju (a wet cultivar); kasiba-small.	<i>Oryza sativa</i> L. [Poaceae]
30.	PM-839; IC no. 560803	Mairong	Mairong-Rice kernel of Maiyen-maiju (a wet cultivar).	<i>Oryza sativa</i> L. [Poaceae]
31.	PM-840; IC no.560793	Banglaima kasiba	Banglaima-A Jhum cultivar rice landrace Banglaisha; kasiba-small.	<i>Oryza sativa</i> L. [Poaceae]
32.	PM-841; IC no. 560803	Mairong kasiba	Mairong-Rice kernel of Maiyen-maiju (a wet cultivar); kasiba-small.	<i>Oryza sativa</i> L. [Poaceae]
34.	PM-842; IC no.560804	Maireng kasiba	Maireng-Rice kernel of Dimri-maisa (a late variety); kasiba-small.	<i>Oryza sativa</i> L. [Poaceae]
35.	PM-843; IC no.560804	Mairengma	Maireng-Rice kernel of Dimri-maisa (a late variety).	<i>Oryza sativa</i> L. [Poaceae]
36.	PM-844; IC no.560804	Maireng kasiba	Maireng-Rice kernel of Dimri-maisa (a late variety); kasiba-small.	<i>Oryza sativa</i> L. [Poaceae]
39.	PM-845; IC no.560804	Maireng	Maireng-Rice kernel of Dimri-maisa (a late variety).	<i>Oryza sativa</i> L. [Poaceae]
40.	PM-846; IC no.560804	Maireng kasiba	Maireng-Rice kernel of Dimri-maisa (a late variety); kasiba-small.	<i>Oryza sativa</i> L. [Poaceae]
41.	PM-847	Kimbersi	Kim-Kimdaula plant; ber- flower	<i>Gloriosa superba</i> L. [Liliaceae]
42.	PM-848	Birengsa	Biring maisa-A fine sticky rice landrace, used for traditional beer Biron-judima preparation.	<i>Oryza sativa</i> L. [Poaceae]

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