

## Ethnobotanicals used by tribals of Mizoram for furniture and household equipments

Sujata Bhardwaj & SK Gakhar\*

Bhaskracharya College of Applied Sciences, Sector 2, Dwarka, New Delhi 110 045;

\*Department of Biosciences, Maharshi Dayanand University, Rohtak 124 001, Haryana

E-mail: gakharsk@yahoo.co.in

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Results of ethnobotanical studies carried out in the state of Mizoram are presented. The usage of wild plants by the native people for furniture, household equipments and fuel is described. A *Mizo* hut is invariably raised on wooden post. Uses of 39 plant species along with their local names have been enumerated. Similarly, 6 plant species, which are used as fuel wood having excellent energy output with less smoke have been identified.

**Key words:** Ethnobotany, Traditional furniture, Household equipments, Fuel, Mizoram

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The people and races in India are more diverse than any other country in the world. In Northeastern region of India, many tribes of different ethnic groups like *Garo, Khasi, Jaintia, Naga, Kuki, Manipuri, Mizo, Mara, Pawis, Chakmas, Dafla* and others are found in tribal pockets. The rural folks and tribes of these areas still hold on to their traditional faith, and still depend on the indigenous plants for their various needs. This is more so in the state of Mizoram, particularly in southern part because of its remoteness, there is strong interaction and association between the natives and their plant environment. The villages remain cut off from the district headquarters for months together because of heavy rains and *Kuchcha* roads. Therefore, tribes have not forgotten their age old customs and traditions. Knowledge about plants, especially of wild plant, which they use in their daily life for various purposes, is still with them and is conspicuous due to their lack in documentation.

During last 20 yrs, a region-wise work in ethnobotany has been done only in Himalayas, central India, Bihar and Northeast. In the Northeastern part of India, most of the work has been done in the state of Assam, Meghalaya, Nagaland and Arunachal Pradesh<sup>1-26</sup>. Until date, no such ethnobotanical studies seem to have been carried out in the state of Mizoram. The present investigations have been carried out to identify the plants being used by the tribes of Mizoram for furniture, household equipment and fuel.

### Methodology

The ethnobotanical data was collected through interviews, discussions with the villagers and personal observations. Many remote villages were visited and tribals living there were interviewed. Care was taken that elders were there in each group as they had more knowledge about plant uses. Discussions were also carried out with the villagers. These were generally done in larger groups. A topic was generally given and informal discussion generated with the tribals. The local houses of tribes, vegetable market, festivals, dance ceremonies and other functions were visited and observed. The roles of plants in these were noted. Plants used by tribals were collected and dried. The photographs of both dried and fresh specimens were taken as and when required. Valuable information was collected from literature, particularly on Mizoram. Invaluable information was also collected from literature written by locals for their own use in local language. The forest department officials help was also sought to gather information on plants, their collection and identification. The plant specimens were identified from State Forest Service College, Dehradun; Indira Gandhi National Forest Academy, Dehradun; Forest Research Institute, Dehradun; Indian Council for Forest Research and Education, Dehradun; Forest Department of Mizoram and Indian Agricultural Research Institute, Pusa, New Delhi. The voucher specimens are housed in the herbarium.

\*Corresponding author

## Results and discussion

About 39 plants are found to be used for making furniture and household equipments belonging to 39 genera and 27 families in Mizoram (Table 1). Similarly, 7 other plants species belonging to 7 genera & 7 different families were found to be used by the tribals of Mizoram as fuel woods.

*Mizo* tribes live in remote areas and are cut off from the rest of the world for months together. They live in huts and most of the household equipments come from the forest itself. There was no *pucca* house made up of bricks, etc. in the village areas. Most of the houses were made of bamboo and other woods from the forest. A *Mizo* hut was invariably raised on wooden post on mountain sides. Their furniture and other household equipments also were made of plants and their products. For making their houses, they depend on as many as 39 plants species. Out of these

39 species, at least 11 species have been identified for making posts on which their huts are raised. Tribals of other parts of the country also use some of these species as *Miris* make use of the trunk of *Terminalia chebula* Retz. and *T. bellirica* Roxb. for making wooden posts<sup>27</sup>. *Mizos* also using tree trunk of *T. myriocarpa* Heurck & Muell. Arg. for making wooden posts. Similarly, wood of *Lagerstroemia speciosa* Pers. is being used for erecting posts for making huts. Tribals of Nicobar Islands use wood of *L. hypoleuca* Kurz for making boats<sup>28</sup>. *Miris* of Assam also use wood of *Anthocephalus heterophyllus* for making furniture and planks; *Bambusa tulda* Roxb. for making various household equipments and *Calamus erectus* for making houses for chicken<sup>18</sup>. Inflorescence of *Thysanolaena maxima* (Roxb.) Kuntze is used for making brooms by the tribals of central India and also by the tribals of Mizoram<sup>29</sup>.

Table 1 — Ethnobotanicals used by *Mizo* tribals for furniture, household and fuel

Plant name (Family)	Local name	Locality	Uses
<i>Adhatoda zeylanica</i> Medic. (Acanthaceae)	<i>Kawl-dai</i> – Mizo	Lunglei	For fencing the houses
<i>Albizia thompsoni</i> Brandis (Leguminosae)	<i>Thingri</i> – Mizo	Lungsen	For making pegs, fencing and posts; house construction.
<i>Alseodaphne petiolaris</i> Hook. f. (Lauraceae)	<i>Khuangthulh</i> – Mizo	Lungsen	Trunk is used for making wooden posts.
<i>Areca gracilis</i> Roxb. (Arecaceae)	<i>Tartiang</i> – Mizo	Lunglei	For making walking stick.
<i>Artocarpus chaplasha</i> Roxb. (Moraceae)	<i>Tat-kawng</i> – Mizo	Saiha	For making doors.
<i>Bambusa tulda</i> Roxb. (Poaceae)	<i>Rawthing</i> – Mizo <i>Rasang</i> – Lakher <i>Bachori</i> – Chakma	Lunglei	Used for making floor and walls.
<i>Bischofia javanica</i> Blume (Euphorbiaceae)	<i>Khuang-thli</i> – Mizo	Lungsen	For making wooden posts during house building.
<i>Boehmeria regulosa</i> Wedd. (Urticaceae)	<i>Lenlang</i> – Mizo	Lungsen	For fencing and house construction.
<i>Borassus flabellifer</i> Linn. (Palmae)	<i>Thiakra</i> – Mizo	Lawngtlai	Leaves are used for writing; cut flower stalks yield sugar and toddy. Leaves are used for making roof of huts.
<i>Breonia chinensis</i> (Lamk.) A. Rich. ex Walp. (Rubiaceae)	<i>Banphar</i> – Mizo	Tlabung	Trunk is used for making posts during house building; for making roof of houses.
<i>Calamus erectus</i> Roxb. (Arecaceae)	<i>Hruipui</i> – Mizo; <i>Ari</i> – Lakher	Lunglei	For making strings of the bows for teasing cotton. Women carry the load by the help of a brow-band attached to the big basket at the back. The brow-band is made from ari cane.
<i>Canthium glabrum</i> Blume (Rubiaceae)	<i>Batling</i> – Mizo	Lunglei	Commonly used for making huts; as firewood.
<i>Castanopsis tribuloides</i> A. DC. (Fagaceae)	<i>Thingsia</i> – Mizo	Saiha	For making huts.
<i>Cephalostachyum capitatum</i> Munro (Poaceae)	<i>Rawngal</i> / <i>Rangia</i> – Mizo	Lunglei	For making the weaving apparatus.
<i>Cephalotaxus griffithii</i> Hook. f. (Coniferae)	<i>Tufar</i> – Mizo	Lunglei	For house building and making furniture.
<i>Chisocheton paniculatus</i> Hiern (Meliaceae)	<i>Sahtahpui</i> – Mizo	Lungsen	For furniture and making wooden posts.

Table 1 — Ethnobotanicals used by *Mizo* tribals for furniture, household and fuel — *Contd*

Plant name (Family)	Local name	Locality	Uses
<i>Cyathocalyx martabanicus</i> Hook. f. & Thoms. (Annonaceae)	<i>Zathu</i> – Mizo	Lunglei	For making weaving machines.
<i>Daphnidium bifarium</i> Nees (Lauraceae)	<i>Saper</i> – Mizo	Lunglei	For household construction.
<i>Derris robusta</i> Benth. (Leguminosae)	<i>Thingkha</i> - Mizo	Pukpni	Wood is used as fuel.
<i>Dinochloa compactiflora</i> (Kurz) Meclure (Poaceae)	<i>Sairil</i> – Mizo	Lunglei	For making baskets, hats, mats, sieve ( <i>Vaiherik</i> ), etc.
<i>Duranta repens</i> Linn. (Verbenaceae)	<i>Hlingdai</i> – Mizo	Lunglei	Trunks bearing thorns are used for making fencing.
<i>Euphorbia royleana</i> Boiss. (Euphorbiaceae)	<i>Chawng</i> - Mizo	Lungsen	Plants are used for making fencing around house.
<i>Garuga pinnata</i> Roxb. (Burseraceae)	<i>Bungbutuairam</i> – Mizo	Hnanthial	For making post or pegs in house construction.
<i>Gmelina oblongifolia</i> Roxb. (Verbenaceae)	<i>Vawngthla</i> – Mizo	Saiha	For making the post. It does not rot easily.
<i>Hibiscus macrophyllus</i> - Roxb. (Malvaceae)	<i>Vaiza/ Pazo</i> – Mizo	Saiha	Ropes/strings are made from bark and attached to two sides of headband to tie around the load. Strings of arrows and fishing lines are also made out of bark strings.
<i>Lagerstroemia speciosa</i> Pers.(Lythraceae)	<i>Patongpa</i> – Mizo	Hnanthial	For erecting posts for house construction.
<i>Lithocarpus dealbatus</i> (Hook. f. & Thoms.) Rehd. (Fagaceae)	<i>Fah</i> – Mizo	Saiha	For making mallet and stick; wood is used as firewood.
<i>Macaranga denticulata</i> Muell. Arg. (Euphorbiaceae)	<i>Hnakhar</i> – Mizo	Lunglei	Used as firewood.
<i>Mangifera sylvatica</i> Roxb. (Anacardiaceae)	<i>Harifarang</i> –Mizo	Lunglei	For making posts during house construction; wood used as firewood.
<i>Melocanna bambusoides</i> Trin. (Poaceae)	<i>Mautak</i> – Mizo	Hnanthial	Used for making floor and walls of huts. On bamboo matting meat & fish are smoked and paddy is dried before pounding. Thin shoots are used as straw for drinking. Used for making drinking cups and weaving looms.
<i>Melodorum bicolor</i> Hook. (Annonaceae)	<i>Hruivawm</i> – Mizo	Lungsen	For binding post during house construction.
<i>Michelia champaca</i> Linn. (Magnoliaceae)	<i>Nigel</i> – Mizo	Champhai	For making furniture and construction of houses.
<i>Pandanus odoratissimus</i> Linn. f. (Pandanaceae)	<i>Ramlakhuih</i> – Mizo	Lunglei	Fruit is cut and the exposed fibres are used as brush to clean floors as a broom. Fibres are used for weaving.
<i>Phrynium capitatum</i> Willd. (Scitamineae)	<i>Hnanthial/ Chaihna</i> – Mizo	Hnanthial	Leaves being large are used for roofing the huts; for wrapping vegetables, meat, etc. Leaves are used to make rain hat; also placed between the latticework of bamboo to make the hat waterproof.
<i>Premna milleflora</i> C.B. Clarke (Verbenaceae)	<i>Vawngthlie</i> - Mizo	Lunglei	For making furniture.
<i>Pseudostachyum polymorphum</i> Munro (Poaceae)	<i>Chal</i> – Mizo	Lunglei	Bamboo is used for making roof mats and other household articles.
<i>Schima wallichii</i> (DC) Korth. (Theaceae)	<i>Khiang/Khainei/Pa khai</i> – Mizo	Saiha	Paddy mortar is made from wood. Broad logs are cut and hollowed out at one end to form the mortar. Used in furniture; as timber and fuel.
<i>Terminalia myriocarpa</i> Heurck & Muell. Arg. (Combretaceae)	<i>Char</i> – Mizo	Lunglei	For making wooden posts in the construction of houses.
<i>Tetrastigma bracteatum</i> (Wall. Ex M. Laws.) Planch. (Vitaceae)	<i>Hruirithet</i> – Mizo	Lunglei	Used as a string to tie things.
<i>Thysanolaena maxima</i> (Roxb.) Kuntze (Poaceae)	<i>Hmunphiah</i> – Mizo	Lunglei	Inflorescence is used for making brooms for cleaning.
<i>Trema orientalis</i> Blume (Ulmaceae)	<i>Belphuar</i> – Mizo	Lungsen	The bark is removed and used for making ropes.
<i>Ulmus lancifolius</i> Roxb.(Ulmaceae)	<i>Phan</i> - Mizo	Tlabung	Wood is used as fuel wood.

Six plant species belonging to 6 families are predominantly used by the *Mizo* tribes as fuel wood. However, they use any dried jungle wood for this purpose but prefer these 6 species for fuel wood. Their preference may be due to excellent energy output and less smoke, which these 6 species generate. This particular fact requires further analysis and study. *Mizos* also use these woods for smoking their food products like fish, pork, etc. over their fire place, and prefer these 6 species for best of flavours and curing purposes. The tribes have near total dependence on forest produce for making the house and other household equipments. This phenomenon is widely prevalent all through Mizoram and specially in the area under study.

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