

# Traditional Knowledge of Plants used in Rituals by Inhabitants of Rural Himalaya

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## ABSTRACT

In rural Himalaya, local inhabitants use a range of plants to perform various ritual ceremonies round the year which makes their religious culture and folklore unique. Therefore realizing the significance of plants in cultural tradition, the present study was undertaken with the aim to document the information associated with the use of plants in different rituals. Focus group discussion and informal discussion with the local people, religious persons and aged people was conducted to document the indigenous knowledge of plants used in different ritual ceremonies. The study reported 16 plant species from 14 families and 16 genera that were used during various rituals. Out of 16 plant species reported, 43.75% were trees, 31.25% were herbs and 12.5% were shrubs and 12.5% were climbers. The most frequently utilized plant part was the leaf followed by twig, rhizome/tuber, fruit and flower. Out of the total species maximum numbers of species were used during marriage followed by *puja*, to keep away the evil spirits from house and during fast. The present study shows that the local inhabitants of rural Himalaya have vast folk knowledge about the plants used in rituals. This information will assist in creating awareness among younger generations in present as well as future time and will help in conserving the species of cultural importance.

**Keywords:** Cultural importance; Rural Himalaya; Indigenous; Inhabitants; Tradition

Traditional knowledge is profoundly linked with natural resources and constitutes an essential facet of ancient cultural groups. This knowledge grows in close inter-reliance with the surroundings covering immense and diverse scopes for information generation (Sharma *et al.* 2013). From many decades, aboriginal people are believed to survive or live primarily in remote and inaccessible areas where they used to sustain their livelihood directly from forests and agricultural lands. Many researchers stated that the indigenous botanical knowledge of cultural communities with respect to the utilization

and management of wild plant resources is extensive (Cotton, 1992; Balick and Cox, 1996; Sharma *et al.* 2013).

The rural communities all over the world rely on various plant resources for the fulfillment of their daily requirements as well as maintenance of different natural resources. Collection of different plants from various localities based on their indigenous knowledge and practices for utilization purpose is widely known around the globe (Joshi *et al.* 2011). Due to the familiarity of the human being to a variety of natural resources they have created

valuable local knowledge systems that comprise of widespread information on use of plant for general, domestic and sacred purposes (Mohanty *et al.* 2011). At present all over the world, nearly ten thousands plant species are used by different human groups for a range of purposes which includes ritual ceremonies, fuelwood, fodder for livestock, food, fiber, oil, medicine and spices (Heywood, 1992).

However, many other studies emphasized on the significance of cultural aspects such as the curative meaning given to a plant, beliefs, religion or the historical context (Mendez-Baceta *et al.* 2011). The need for the incorporation of local indigenous knowledge for conservation and sustainable management of natural resources is necessary in the present scenario (Posey, 1992; Sharma *et al.* 2013) which demands for an urgent need for documentation of traditional knowledge, by focusing on the expansion of different important cultural practices. With the aim to document information associated with the use of plants in various ritual ceremonies the present study was carried out. The objective of the present study is to acquire knowledge from local inhabitants to generate awareness in relation to their cultural beliefs and to come forward in terms of their utilization along with preservation of plant related knowledge among younger generations.

#### Research Method

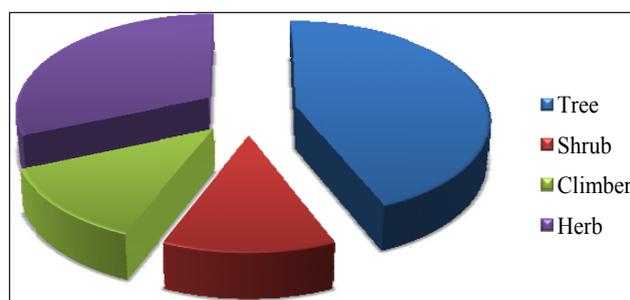
The present study was carried out in two villages of Pauri Garhwal District i.e., Manjgaon (29°54'54.2"N, 78°52'27.8"E; 1500 m amsl) and Mald Bada (29°55'04.8"N, 78°52'43.7"E; at 1534 m amsl) during 2011-2012. The inhabitants of both villages are mostly dependent on forest and agricultural resources for their livelihood activities. Common trees around habitation and on agricultural fields are *Prunus cerasoides*, *Celtis australis*, *Toona ciliata*, *Ficus roxburghii*, *Ficus palmata*, *Quercus leucotrichophora*, *Bauhinia variegata*, *Grewia optiva* and *Sapium insigne*.

In the present study collection of primary data was carried out mainly through focus group discussion and informal discussion with the local people, religious persons and aged people to document the indigenous knowledge of plants used in ritual ceremonies. The information was collected by personal visit to the study area and discussion with respondents with their prior oral consent. The

discussions with locals (mainly elderly people and women) lasted for one hour and were conducted in Hindi as well as in local dialect (Garhwali).

## RESULTS AND DISCUSSION

The present paper is an attempt to analyze the use of plant resources with respect to their use in various ritual ceremonies by the local inhabitants of rural Himalaya. The results of the study reported that 16 plant species were used during various rituals. These plant species were distributed among 14 families and 16 genera. Out of 16 plant species reported, 43.75% were trees, 31.25% were herbs and 12.5% were shrubs and climbers each (Fig. 1).



**Fig. 1:** Pie diagram showing various life forms

The most frequently utilized plant part was the leaf (50.0%) followed by twig (31.25%), rhizome/tuber (25.0%), fruit (18.75%) and flower (6.25%). Out of the total species maximum number of species were used during marriage (11 species) followed by puja (10 species), to keep away the evil spirits from house (2 species) and during fast (2 species) (Table 1). The species used for ritual purpose in the present study were *Aegle marmelos*, *Artemisia vulgaris*, *Bauhinia vahlii*, *Cautleya spicata*, *Colocasia esculenta*, *Cynodon dactylon*, *Ficus roxburghii*, *Juglans regia*, *Mangifera indica*, *Pinus roxburghii*, *Prunus cerasoides*, *Rosa macrophylla*, *Sapium insigne*, *Stephania glabra*, *Valeriana jatamansi* and *Zanthoxylum armatum* (Table 1).

Use of leaves of *Bauhinia vahlii* and *Ficus roxburghii* for making small bowls for during marriage and puja was a common practice. The use of *Cautleya spicata* and *Valeriana jatamansi* with turmeric for essence was used particularly in marriage ceremonies. Fruit of *Mangifera indica* and tuber of *Colocasia esculenta* was reported by the inhabitants to be consumed during fasts. Needles of *Pinus roxburghii* and leaves of *Prunus cerasoides* was used for decorating bedi and house gate in marriage ceremony. Tuber of

**Table 1:** List of plants used in rituals by local inhabitants

Plant species	Family	Life form	Common name	Part used	Type of ritual ceremony
<i>Aegle marmelos</i> (L.) Correa	Rutaceae	Tree	Bel	Fruit, Leaf, Twig	Puja
<i>Artemisia vulgaris</i> L.	Asteraceae	Herb	Kunju	Leaf	Puja Marriage
<i>Bauhinia vahlii</i> Wight. & Arn.	Leguminosae	Climber	Malu	Leaf	Puja, Marriage
<i>Cautleya spicata</i> (Sm.) Baker	Zingiberaceae	Herb	Jadhaldu	Rhizome	Marriage
<i>Colocasia esculenta</i> (L.) Schott.	Araceae	Herb	Tairu	Tuber	Fast
<i>Cynodon dactylon</i> (L.) Pers.	Poaceae	Herb	Doob	Leaf	Puja, Marriage
<i>Ficus roxburghii</i> Steud..	Moraceae	Tree	Timla	Leaf, Twig	Puja, Marriage
<i>Juglans regia</i> L.	Juglandaceae	Tree	Akhrot	Fruit	Puja, Marriage
<i>Mangifera indica</i> L.	Anacardiaceae	Tree	Aam	Fruit, Leaf, Twig	Puja, Marriage, Fast
<i>Pinus roxburghii</i> Sarg.	Pinaceae	Tree	Chir	Leaf	Marriage
<i>Prunus cerasoides</i> Buch.-Ham ex D. Don	Rosaceae	Tree	Panya	Leaf	Puja, Marriage
<i>Rosa macrophylla</i> Lindl.	Rosaceae	Shrub	Jungli gulab	Flower	Puja, Marriage
<i>Sapium insigne</i> (Royle) Benth. & Hook. f.	Euphorbiaceae	Tree	Khinnu	Twig	Puja
<i>Stephania glabra</i> (Roxb.) Miens	Menispermaceae	Climber	Gindara	Tuber	Evil spirit
<i>Valeriana jatamansi</i> Jones	Caprifoliaceae	Herb	Sumaya	Rhizome	Marriage
<i>Zanthoxylum armatum</i> DC.	Rutaceae	Shrub	Timru	Twig	Evil spirit

*Stephania glabra* and twigs of *Zanthoxylum armatum* was used to keep away the evil spirits from house and was reported by most of the villagers during group discussions. Staub *et al.* (2011) in their study also reported the use of plant derived smoke for religious purpose is widespread throughout the world for incense (such as *Cupressus funebris* Endl. *Gaultheria fragrantissima* Wall. and *Ligustrum sempervirens* (Franch.)). According to their study use of incense mixtures is a commonly practiced at household and community level to communicate the deities in various rituals, evil spirits and in some cases to strengthen self-awareness. In a study by Geng *et al.* (2017) reported that in Naxi people of Yunnan Province, Southwest China possess sound knowledge of the traditional ritual plants used in various rituals and festivals. They grouped the use of ritual plants into two classes i.e., burned as incense and used for decoration. The knowledge of plant species, socio-cultural activities, household and ritual practices among various human societies reflect the inter-reliance and harmony with the living beings of the surrounding areas (Mohanty *et al.* 2011).

The present study also reported that the inhabitants use the plants and their parts. Apart from their use in various ritual ceremonies they are also used these plants for medicinal purposes. Inhabitants also revealed that they make an effort to live in

the vicinity of these plants for their wellbeing as well the spiritual support. The study also suggests creating awareness regarding the use of plants in rituals among younger generations as the traditional knowledge regarding their use is lacking. Similar statement has also been pointed out by Geng *et al.* (2017) stating that importance of creating awareness among the younger generations about the use of traditionally used ritual plants.

## CONCLUSION

The present study emphasizes that traditional belief and ritual practices can be opted as an alternative way to conserve the plant diversity not only in rural areas but also in urban localities. Since these local practices are not led by governmental policies therefore the use of ritual plants can act as constant reminders in conservation and management of culturally important plant species. However, further explore and investigation is needed and suggested for in-depth knowledge on the role of religious customs and beliefs in conservation of ritual plants.

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