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TRADITIONAL USES OF PLANTS IN VARIOUS RITUALS AND CEREMONIES AMONG THARU TRIBE OF UDHAM SINGH NAGAR, KUMAUN HIMALAYA UTTARAKHAND, INDIA

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ABSTRACT

Uttarakhand also referred as “Dev Bhoomi” or “Land of Gods” is well known for rich plant wealth, tribal diversity and cultural heritage. Tharu is the largest tribe in Udhm Singh Nagar and more concentrated in eastern part of the district. They have deep faith in their deities, rituals and ceremonies and involve several plants in their socio-cultural life. The present investigation highlights traditional uses of plant wealth in various rituals and ceremonies among the Tharu tribe of Udhm Singh Nagar. The extensive and intensive field visits were organized in various Tharu villages to observe their rituals and ceremonies. Tharu people were discussed and interviewed about the traditional uses of plants at different occasions. The recorded plant species were collected, identified and preserved for future record. During field study, a total of 43 plant species under 39 genera of 23 families were recorded, among which 13 plant species were found to be growing in wild condition and remaining 30 species were observed in cultivated areas. Most of the plant species belonged to the Poaceae family (7 Spp.) followed by Apocynaceae (5 Spp.), Lamiaceae, Malvaceae, Oleaceae and Solanaceae (with 3 Spp. each). Tharus use almost all plant parts as well as whole plants in worship of their deities and at various rituals in festivals, ceremonies and cremation. They believe in the supernatural power of plants and use many species to keep away evil spirits. It was noted that *Tagetes erecta* L. is the most useful species and cultivated in gardens of almost all tharu families.

Keywords : Rituals, Tharu, Traditional Knowledge, Udhm Singh Nagar.

Introduction

Plant worship is one of the oldest forms of worship in the world (Devi *et al.*, 2020). Whole plant and its different parts have been used in almost all rituals and ceremonies in Indian culture since time immemorial. In Hindu mythology, none of the festivals, rituals or religious ceremonies complete without involvement of plants and plant parts (Agarwala, 1970). Uttarakhand, a hilly state of India with varied altitudinal variations has rich plant as well as ethnic diversity. Udhm Singh Nagar lying in tarai belt of Kumaun Himalaya harbors luxurious plant growth. Among five notified tribes, Tharu, the most popular tribe is the largest one in Udhm Singh Nagar as well as in Uttarakhand representing a population of 89399 and 91342 respectively (Census, 2011). Approximately 80% tharu population of India is residing in Khatima and Sitarganj tehsils of the district Udhm Singh Nagar (Rajpoot *et al.*, 2016). Tharus belong to the central group of the Indo-Aryan family of language (Bisht, 2006) and worship a multitude of deities (Ganga, 2019). They adore their own totems called Bhoomiya (Bhoomsen Ji), although they also believe in Hindu God and Goddess (Rajpoot *et al.*, 2016). Considerable reports are available on various sacred & ritual plants used in different parts of India (Chakarborty and Pal, 2004; Jadhav, 2012; Kavitha *et al.*, 2019; Mohanty

et al., 2011; Nongbri *et al.*, 2017; Pawar and Patil, 2010; Pramod *et al.*, 2003; Rana *et al.*, 2006; Sarkar *et al.*, 2010; Seth and Thakur, 2013; Singh and Chauhan, 2004). Various researchers (Ganga, 2019a; Ganga, 2019b; Maiti, 2008; Verma, 2010) have studied religious beliefs and socio-cultural dynamics of Tharu community from an anthropological point of view. Tharu's culture is very eco friendly and all the cultural and other activities are deeply related with nature (Verma, 2010). Holi, Diwali, Navratri, Teej, Harela are the main festivals observed and celebrated by Tharus. Plant resources play an important role in their social life. Some recent works (Dhaila and Adhikari, 2007; Mehta *et al.*, 2008; Rawat *et al.*, 2019; Upreti *et al.*, 2017) have highlight documentation of plants used in religious ceremonies and cultural systems of local inhabitants in Uttarakhand. But, in the case of Tharu, no such detailed study has been carried out in Udhm Singh Nagar as well as Uttarakhand. Due to modernization, urbanization and various other factors, the ritualistic behaviour of tribal people becomes weaker day by day and there is a possibility to vanish this culture in the near future. There is urgent need to record this ethnic cultural knowledge, which plays an important role in the conservation of diverse plant wealth. Therefore, an effort was made to observe Tharu's traditions

from a botanical point of view and document socio-cultural plants used in their rituals, ceremonies and worship.

Materials and Methods

Study area

The study area Udham Singh Nagar, one of thirteen districts of Uttarakhand is located between 28°51'N to 29°23' N latitude and 78°45'E to 80°08' E longitude. Uttarakhand comprises two divisions i.e., Garhwal and Kumaun. Udham Singh Nagar, covering an area of 3055 Km² lies in tarai belt of Kumaun division and comprises seven tehsils viz. Jaspur, Kashipur, Bazpur, Gadarpur, Kichha, Sitarganj and Khatima. Present study was conducted in Sitarganj and Khatima tehsils which are very rich in Tharu population (Fig-1). Area with a rich Tharu population is locally known as “Tharuat”.

Plant collection and tribal interview

The Present study is based on personal interview, field observations and plant collection and laboratory work. The study was conducted in 2020-21 following standard methods (Jain and Mudgal, 1999; Martin, 2004). Frequent field visits were organized in several Tharu villages to observe and record plants used in their various cultural and religious ceremonies. A total of 85 informants were interviewed with the help of semi structural questionnaire. Prior oral consent was taken from informants for their interview and photographs. Information about local name of plant, habit, parts used & method of utilization in various rituals and ceremonies were recorded. Various Tharu ceremonies were also personally attended thus the collected data is based on primary source of information. Documented plants were also collected from the study area and field characters of the plants were noted in the field books.

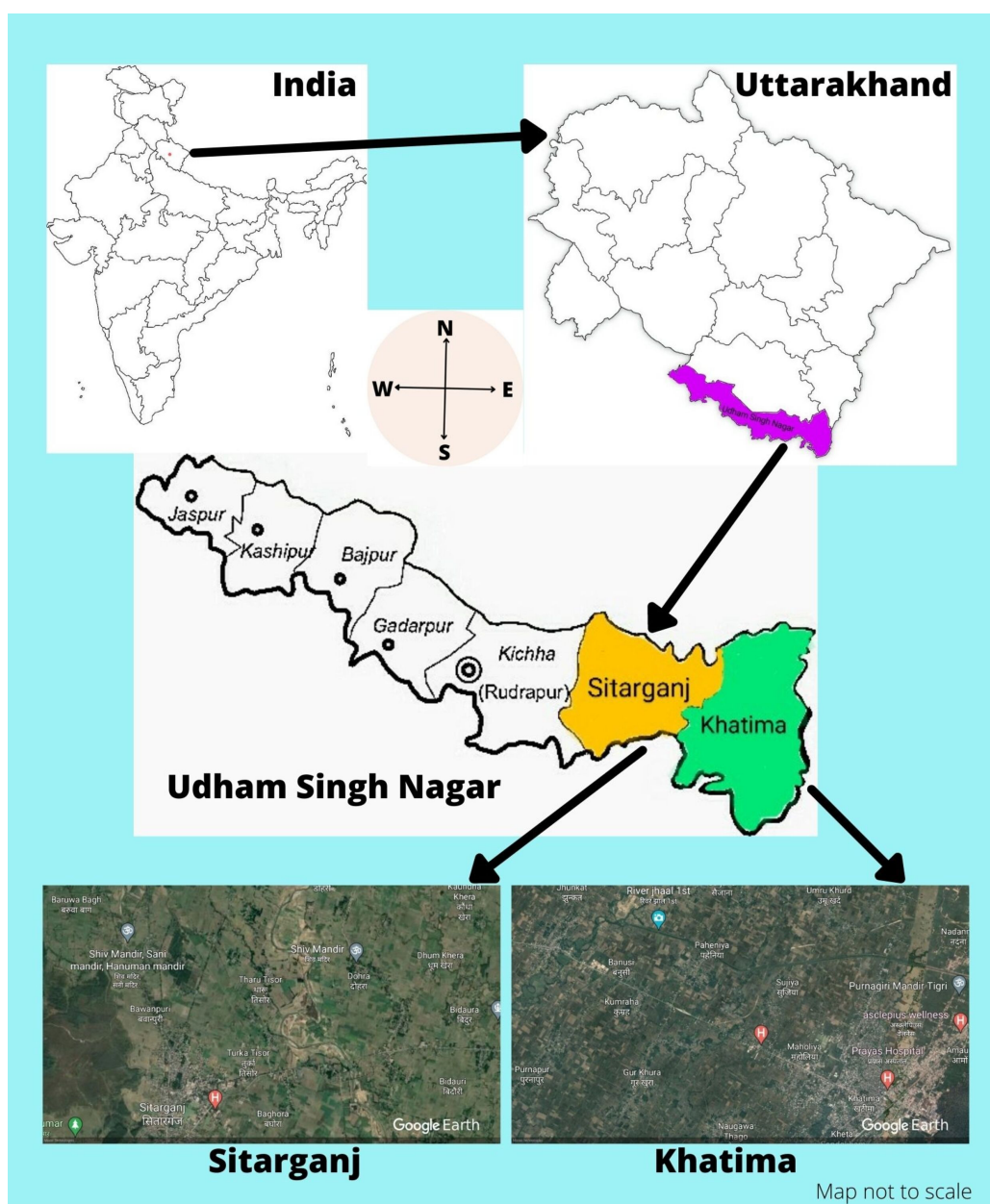


Fig. 1 : Map of study area

Plant identification and herbarium preparation

Collected plant specimens were identified with the help of several reputed floras (Babu, 1977; Duthie, 1903-1929; Gaur, 1999; Gupta, 1968; Kanjilal, 1928; Osmaston, 1927; Pant, 1986; Pusalkar and Srivastava, 2018; Raizada, 1976-1978; Singh *et al.*, 2016; Uniyal *et al.*, 2007), processed for herbarium preparation (Jain and Rao, 1977) and compared with herbarium specimens of Botanical Survey of India, Dehradun (BSD) and Forest research Institute, Dehradun (DD). Voucher specimens were deposited in the Department of Botany, R.H. Govt. P.G. College, Kashipur, Udham Singh Nagar, Uttarakhand for future record.

Results and Discussion

The Tharu people of the study area have a strong belief in the deities, rituals and ceremonies and use several plants in their socio-cultural life. During field study, a total of 85 Tharu people were interviewed, out of those 46 female and 39 male informants took part in group discussion and shared their traditional knowledge (Fig-2a). Table-1 represents the data obtained from field survey and interview which includes 43 plant species, its botanical name, family, collection number, local name, life form, parts used & methods of utilization of plants in various rituals, worship and ceremonies. All the 43 documented plant species belonged to 39 genera and 23 families (20 Dicot and 3 Monocot families). Out of these 22 (51%) herbs, 09 (21%) shrubs and 12 (28%) tree were observed (Fig-3). Some commonly used plants are exhibited in Fig. 4.



Fig. 2: (a- f) a- Interview with Priest of Biyandhura Baba Ji temple in the village “Tharu Tisor”. b- A Tharu lady with plants of *Hordeum vulgare* L. used for worship; c- Leaves of *Aegle marmelos* (L.) Corrêa offered to Lord Shiva; d- Tharus’ totems in the shade of *Ficus religiosa* L. tree; e- Tharu ladies preparing religious sign with *Triticum aestivum* L. floor and *Curcuma longa* L. powder for **Haldi** ceremony near their Deities; f- Wedding **Mandap** of Tharu marriage ceremonies.

Table 1: Plants used in various ritual and ceremonies among tharu tribe

S No	Botanical name	Family	Local name	Collection number	Life forms	W / C	Parts used	Method of utilization
1	<i>Aegle marmelos</i> (L.) Corrêa	Rutaceae	Belpatri	915	T	W	Ft & Lf	Fresh Fruits & leaves are used in worship of Lord Shiva.
2	<i>Azadirachta indica</i> A. Juss.	Meliaceae	Neem	938	T	W	Lf & Tw	Leaves and twigs are rotated around the affected person to ward of the evil eye.
3	<i>Brassica nigra</i> (L.) W.D.J. Koch	Brassicaceae	Sarson	919	H	C	Sd	Seed oil is used in lighting the lamp in various rituals and ceremony. Oil with turmeric powder is used in Haldi ceremony of groom and bride. Dry seeds with capsicum are used to keep away from evil spirits.
4	<i>Calendula officinalis</i> L.	Asteraceae	Calendula	917	H	C	Fl	Flowers are used in worship of totems.
5	<i>Calotropis gigantea</i> (L.) W.T. Aiton	Apocynaceae	Aak	942	S	W	Fl	Flowers are offered to Lord Shiva.
6	<i>Calotropis procera</i> (Aiton) W.T. Aiton	Apocynaceae	Aak	935	S	W	Fl	Flowers are used in worship of Lord Shiva.
7	<i>Cannabis sativa</i> L.	Cannabaceae	Bhang	931	H	W	Lf	Leaves are used to offer to Lord Shiva.
8	<i>Capsicum annuum</i> L.	Solanaceae	Lalmirch	928	H	C	Ft	Dried red fruits with black mustard seeds are used to ward of the evil eye.
9	<i>Cascabela thevetia</i> (L.) Lippold	Apocynaceae	Kaner	941	T	C	Fl	Yellow flowers are used in worship of Lord Shiva.
10	<i>Catharanthus roseus</i> (L.) G. Don	Apocynaceae	Sadabahar	936	H	C	Fl	Flowers are used in the daily worship of deities.
11	<i>Cicer arietinum</i> L.	Fabaceae	Chana	926	H	C	Sd	Seeds are used to offer to Maa Durga. Seed powder is to make different dishes specially “Kadhee” and for “mandapbhaj”. Seed powder is used as “ubtan” to be sanctifying the body.
12	<i>Coix lacryma-jobi</i> L.	Poaceae	Gunja	905	H	W	Sd	Dry seeds are used to make garland and bracelets in Haldi & mehndi ceremonies of marriage.
13	<i>Curcuma longa</i> L.	Zingiberaceae	Haldi	906	H	C	Rh	Paste of rhizome is used in Haldi ceremony of bride and groom. Powder of dried rhizome is used to prepare “welcome figure” for God in pavilion.
14	<i>Cynodon dactylon</i> (L.) Pers.	Poaceae	Doobghaas	934	H	W	Lf	Leaves are used in worship of many deities and also used in Haldi ceremony and wedding rounds during marriage. It is also used as dish cleaner.
15	<i>Dalbergia sissoo</i> Roxb. ex DC.	Fabaceae	Sheesham	925	T	W	Wd	Woods are used in Funeral.
16	<i>Datura innoxia</i> Mill.	Solanaceae	Dhatura	903	H	W	Fl & Ft	Flowers and green fruits are used in the worship of Lord Shiva at the occasion of Maha Shivratri and in month of Sawan.
17	<i>Datura metel</i> L.	Solanaceae	Dhatura	909	H	C	Fl & Ft	Flowers and green fruits are used in the worship of Lord Shiva at the occasion of Maha Shivratri and in month of Sawan.
18	<i>Eucalyptus globulus</i> Labill.	Myrtaceae	Lyptus	930	T	C	Wd	Woods are contributed by tharu people in Funeral.
19	<i>Ficus religiosa</i> L.	Moraceae	Peeple	913	T	W	WP	It is considered as a sacred plant and worshiped by Tharu tribe in Bhoomisen temple.
20	<i>Gossypium hirsutum</i> L.	Malvaceae	Kapaas	902	H	C	Ft	Fibres obtained from seed epidermis of fruits are used to prepare “diyabaati” for lighting the lamp in front of deities.
21	<i>Hibiscus rosa-sinensis</i> L.	Malvaceae	Lal Gurhal	940	S	C	Fl	Flowers are used in daily worship of deities.
22	<i>Hordeum vulgare</i> L.	Poaceae	Jau	920	H	C	Ft	Plants with fresh fruits are roasted in fire of “Holikadahan” and used in offering prayers to God. Dried seeds are used in “Hawan”.
23	<i>Jasminum multiflorum</i> (Burm.f.) Andrews	Oleaceae	Jungle Bela	908	S	W	Fl	Flowers are used in the daily worship of deities
24	<i>Jasminum sambac</i> (L.) Aiton	Oleaceae	Bela	927	S	C	Fl	Flowers are used to make bride's “gajra” and garland is also prepared for marriage ceremony.

25	<i>Lawsonia inermis</i> L.	Lythraceae	Mehndi	916	S	C	Lf	Powder of dried leaves is used in Mehandi ceremony of bride and groom before marriage. Tribal women consider it as holy plant and apply it on their palms before every festival.
26	<i>Malvaviscus penduliflorus</i> Moc. & Sessé ex DC.	Malvaceae	Mirchi-gurhal	923	S	C	Fl	Flowers are used in worship of God specially Lord Shiva.
27	<i>Mangifera indica</i> L.	Anacardiaceae	Aam	912	T	C	Lf	Fresh green leaves are used to decorate marriage mandap during marriage ceremony. Leaves are used to prepare "Kalash" for various rituals. Leaves are also offered to deities.
28	<i>Musa × paradisiaca</i> L.	Musaceae	Kela	921	H	C	WP, Lf & Ft	Whole plant, leaves and fruits are used in worship of God. Leaves are used to prepare "wedding mandap".
29	<i>Nyctanthes arbor-tristis</i> L.	Oleaceae	Harsringar	904	T	C	Fl	Flowers are used in the daily worship of God and Goddesses.
30	<i>Ocimum basilicum</i> L.	Lamiaceae	Desi tulsi	907	H	C	WP	It is considered as sacred plant. Tharu people grow it in their courtyard for worship.
31	<i>Ocimum tenuiflorum</i> L.	Lamiaceae	Tulsi	939	H	C	WP	Like <i>Ocimum basilicum</i> L., it is also sacred plant.
32	<i>Oryza sativa</i> L.	Poaceae	Chawal	901	H	C	Sd & SC	Seeds are used in worship, Tilak ceremony and funeral procession. Seed coats are dyed with various colours and used to make welcome rangoli.
33	<i>Rosa indica</i> L.	Rosaceae	Gulaab	929	S	C	Fl	Flowers are used in daily worship of God and Goddesses.
34	<i>Saccharum officinarum</i> L.	Poaceae	Ganna	922	H	C	St	Stem is used in Maha Shivratri festival for offering to Lord Shiva and it is also used at the time of Holikadahan with "Jau".
35	<i>Santalum album</i> L.	Santalaceae	Chandan	924	T	C	Wd	Dried stem powder is used to make body scrub and tilak before marriage ceremony. It is also used in worship of Lord Shiva.
36	<i>Sesamum indicum</i> L.	Pedaliaceae	Kale til	937	H	C	Sd	Seeds are used in wedding rounds and also in Hawan during various rituals.
37	<i>Shorea robusta</i> C.F.Gaertn.	Dipterocarpaceae	Saal	914	T	W	Wd	Tribal people contribute its dried woods in Funeral.
38	<i>Tabernaemontana divaricata</i> (L.) R.Br. ex Roem. & Schult.	Apocynaceae	Chandni	933	T	C	Fl	Flowers are used in daily worship of God and Goddesses.
39	<i>Tagetes erecta</i> L.	Asteraceae	Gainda	911	H	C	Fl	Flowers are used for making garland for deities. It is also used to decorate marriage hall, wedding mandap & houses in "Diwali" celebration. Flowers are also offered to God, Goddesses and Bhoomisen Ji.
40	<i>Tectona grandis</i> L.f.	Lamiaceae	Sagaun	932	T	W	Wd	Tribal people contribute its dried woods in Funeral.
41	<i>Thysanolaena latifolia</i> (Roxb. ex Hornem.) Honda	Poaceae	Jhadu plant	910	H	C	Tw	Twigs are used to make broom which is considered as symbol of Goddess Maha Lakshmi.
42	<i>Triticum aestivum</i> L.	Poaceae	Genhu	918	H	C	Sd	Wheat flour is used to prepare God's offering and also for floor decoration in courtyard.
43	<i>Ziziphus mauritiana</i> Lam.	Rhamnaceae	Ber	943	S	C	Ft	Fresh fruits are offered to Lord Shiva at the occasion of Maha Shivratri.

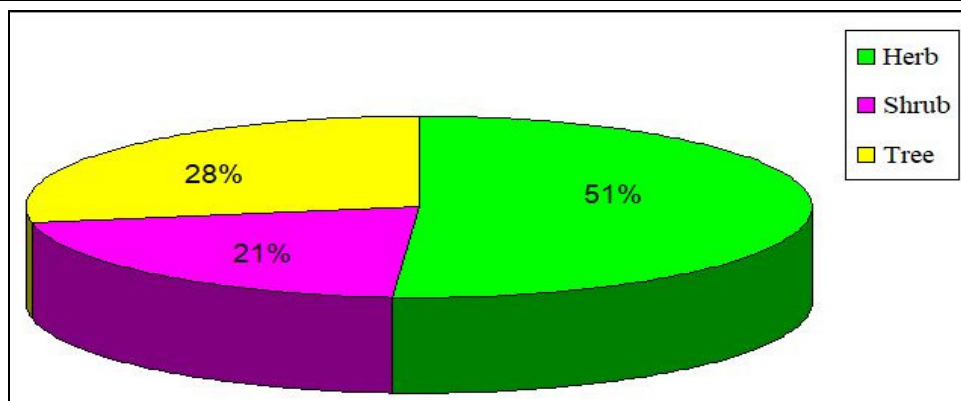
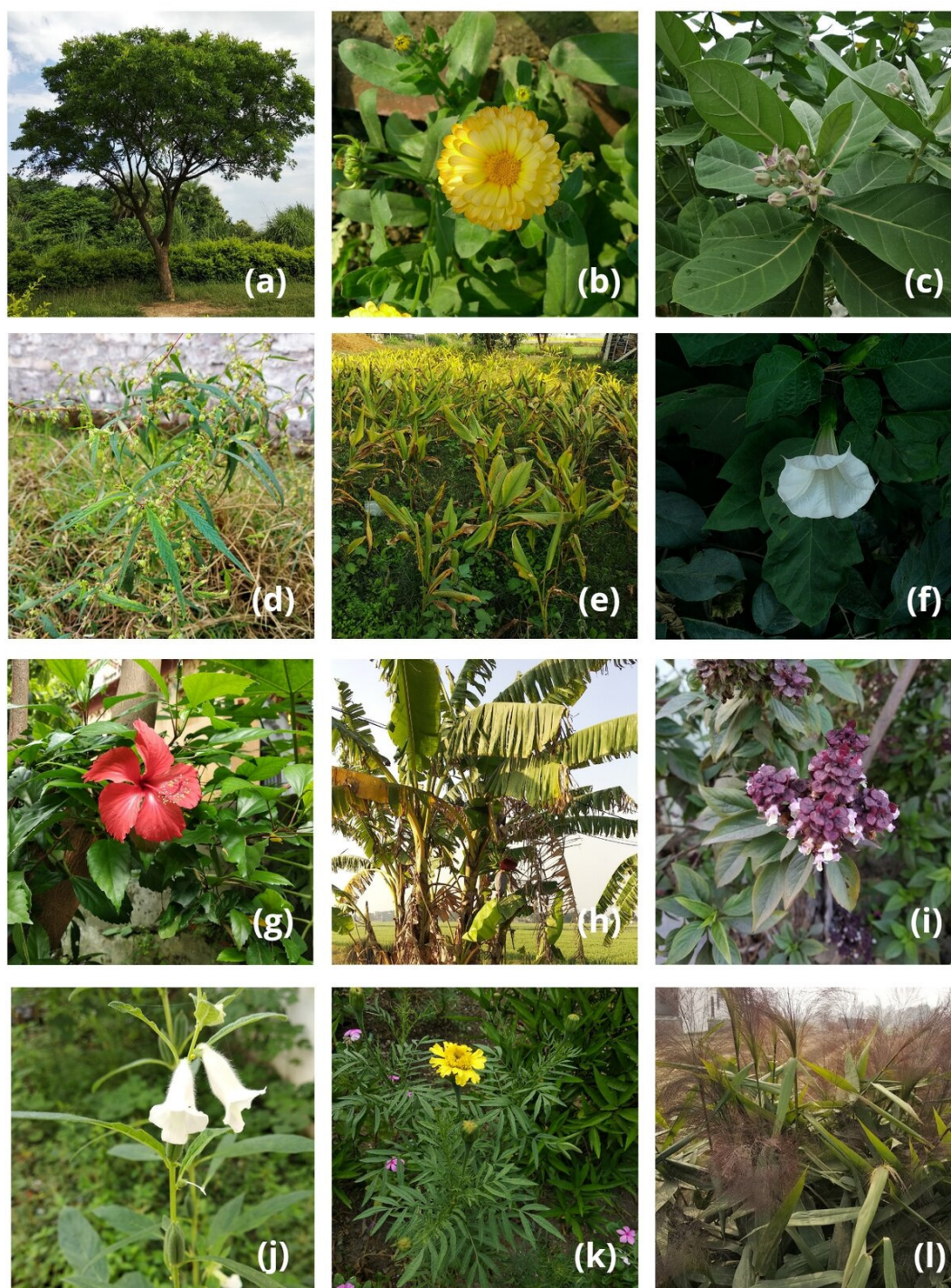


Fig. 3 : Life forms of plants used in various ritual and ceremonies**Fig. 4:** (a-l) Some commonly used plants. a- *Azadirachta indica* A. Juss., b- *Calendula officinalis* L., c- *Calotropis gigantea* (L.) W.T.Aiton, d- *Cannabis sativa* L., e- *Curcuma longa* L., f- *Datura innoxia* Mill., g- *Hibiscus rosa-sinensis* L., h- *Musa × paradisiaca* L., i- *Ocimum basilicum* L., j- *Sesamum indicum* L., k- *Tagetes erecta* L., l- *Thysanolaena latifolia* (Roxb. ex Hornem.) Honda

Plant resources are an integral part of Tharu's social and cultural life and they grow several useful plants in their home garden. During present investigation, 13 (30.23%) plants were found to be growing in wild condition while 30 (69.76%) plant species were observed in cultivated areas. Most of the plant species belonged to the Poaceae family (07 Spp.) followed by Apocynaceae (05 Spp.), Lamiaceae,

Malvaceae, Oleaceae and Solanaceae (with 3 spp each) (Fig-5). Most useful plant parts were flowers (15 Spp.) followed by fruits (08 Spp.), leaves (07 Spp.), seeds (06 Spp.), wood (05 Spp.), twigs (2 Spp.), rhizome (1 Spp.), seed coat (01 Spp.), stem (1 Spp.) and 04 Spp. were used as a whole plant (Fig-6).

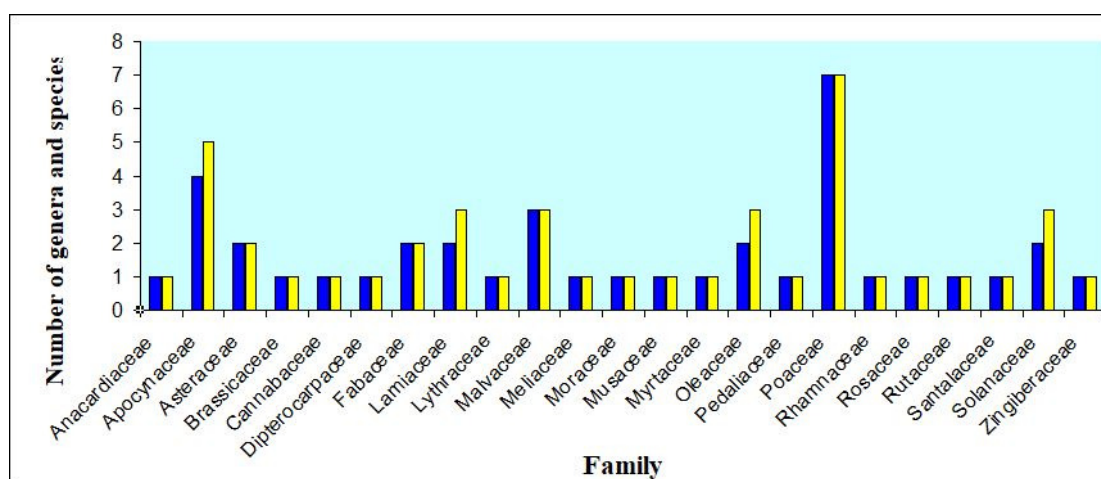


Fig. 5: Number of genera and species found in different families.

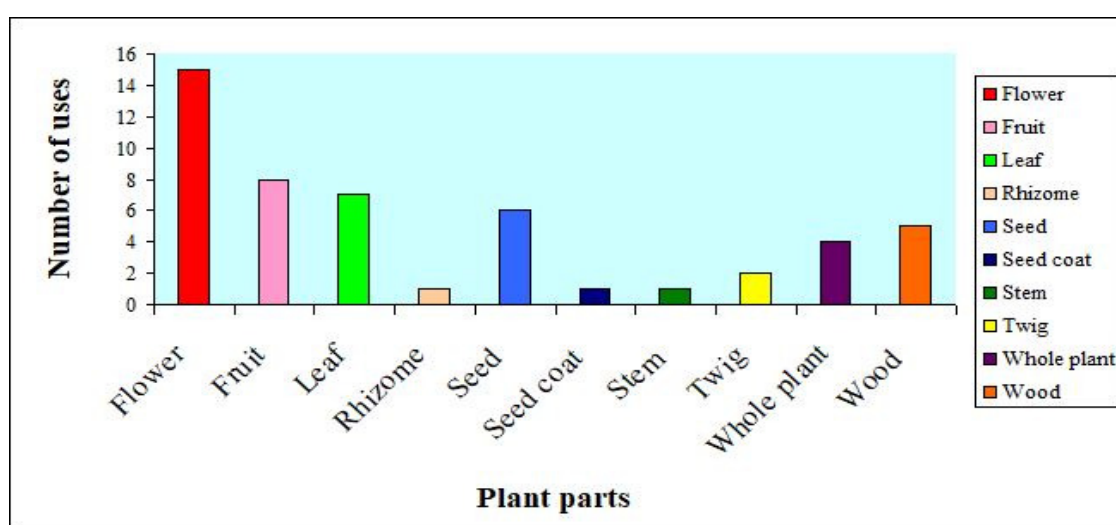


Fig. 6: Plant parts used in various ritual and ceremonies.

Tharu believes in Hinduism and they worship many Gods and Goddesses, totems including *Biyandhura Baba*, *Kali Devi*, *Nagariyai Devi*, *Karo Dev*, *Bhumiya (Bhoomsen Ji)*, *Bhude Baba* etc. They use many plant parts also in worship of God Shiva, Goddess Durga, Goddess Laxmi and other religious functions (Fig. 2b & c). Tharu people worship *Ficus religiosa* L. as sacred tree which was observed to be growing in their Bhoomsen temple (Fig. 2d). They grow *Ocimum basilicum* L. & *Ocimum tenuiflorum* L. plants in their courtyard for worship purposes. The special identity of tharu families is that they have established their totems and deities in the form of particular symbol in the courtyard of their houses (Fig. 2e). They believe in some supernatural power, if they get angry, there is a possibility of some evil. To avoid the outbreak of which, they perform several types of religious rituals. They believe that people affected with such power do not harm anyone. Therefore, the tharu people also have reverence for such powers. Fruits of *Capsicum annum* L., and leaves of *Azadirachta indica* A. Juss. are considered as protectors against evil eyes. During field study, tharu's marriage ceremonies were also attended and thus several plant parts e.g. rhizome, leaves, flowers, seed coat, wood, etc. were observed to be used at different occasions such as **Haldi** ceremony, **Mehandi** ceremony, decoration of marriage hall, makeup of bride and groom, **Hawan** during wedding ceremony, etc (Fig. 2f). Some plants are used in specific festival such as *Saccharum officinarum* L., and

Hordeum vulgare L., in Holi and Navratri; *Datura metel* L. and *Datura innoxia* Mill. in Maha Shivratri and *Tagetes erecta* L. in Diwali. As Tharu people are social in nature, at the time of funeral they contribute wood of *Dalbergia sissoo* Roxb. ex DC., *Eucalyptus globulus* Labill., *Shorea robusta* C.F.Gaertn., *Tectona grandis* L.f. for cremation. It was noted that *Tagetes erecta* L. is the most useful species and cultivated in garden of almost all over the "Tharuat". Various workers (Devi *et al.*, 2020; Kumar *et al.*, 2007; Kumar, 2009; Rawat *et al.*, 2019; Upreti *et al.*, 2017) have reported some of the documented plants used in religious activities of rural people in Uttarakhand.

Conclusion

Plants have a significant role in religious and social ceremonies in rural as well as urban societies. Indigenous uses and religious importance of plants work as catalysts in conservation of biodiversity. Tharu like other tribal communities have wonderful traditional knowledge which is passed orally from one generation to the next. Due to various factors, this heritage is depleting day by day. As the present study is based on documentation and analysis of Tharu's traditional knowledge about plants used in their rituals and ceremonies, the data will be useful to researchers of various disciplines such as anthropology, sociology, ethnobotany and conservation for further investigation.

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