Ethnic Plants of Tharu Community of Eastern Nepal

Sujan Chaudhary1*, Gyanu Thapa Magar2, Shiv Nandan Sah3, Sanju Parajuli1

1*Department of Biology, Central Campus of Technology, Tribhuvan University, Dharan, Nepal
2Department of Botany, Amrit Science Campus, Kathmandu, Tribhuvan University, Nepal
3Department of Microbiology, Central Campus Technology, Dharan, Tribhuvan University, Nepal

Abstract
Ethnobotany is the study of ethnic plants of particular people living in particular place. It accommodates list, details and description of all those studied plants regarding with their various uses. Tharu people belong to one of the indigenous communities especially in Terai region of Nepal. Tharu people have been using these plant resources since 18th century. This study aims to identify ethnic plants of Tharu community of eastern Nepal and their uses in their daily lives. Enumeration of useful plants from Tharu ethnic community was conducted in four villages of Ramdhuni municipality of Sunsari district. Participatory Rural Appraisal (PRA) and household sampling technique were used for data collection. Plant specimens were collected and information regarding it was obtained from local Dhamis, Jhankris, farmers and old age people. This study reported thirty-seven useful plant species under 25 families. In total 37 species, 25 were recorded as medicinal plant, used to treat pneumonia, menstrual disorder, stones, piles, skin disease etc. Other plant species were used for food, fodder, timber, fiber and ceremonial/ religious activities. Most plant species (78.3%) were having multiple use value, and kept under more than one use category and few species (21.7%) with single use category. Trees (27.02%) and herbs (27.02%), both were dominant over grass, shrubs, climbers and creepers. This study has revealed that many plants species are being used by Tharu community of Eastern Nepal as their ethnic plants for medicine, food, fodder, ornament, material etc which needs to be more explored.

Keywords: Ethnobotany; Tharu; Dhami; PRA; Eastern Nepal

Introduction
Ethnobotany established along with the evolution of human beings. Plants and people are in continuous inter-relationship and interaction according to their need (Harshberger, 1896; Martin, 1995). Nepal is multicultural, multilingual and multireligious country. According to the census 2001, Nepal contains 100 caste/ethnic groups and 92 languages. Among them 59 ethnic groups are identified as indigenous nationalities including Tharu. Tharu people are rich in indigenous knowledge and it is deeply rooted in their tradition (Shrestha, 1997). Tharus are one of the indigenous tribe of Nepal and inhabit in- or around the jungle and rivers since 18th century; and regarded as the "sons of the forest" (Bhatt, 1977). They are inhabitants of different places in lowland area Chitwan, Dang, Sunsari, Morang, Kapilvastu, Nawalparasi, Rautahat districts (CBS, 2011).Their population was 6.8% of total National population and 13.47% of Terai region (CBS, 2001). Tharu people have been using various plant species for medicinal, food, fodder, timber and other purposes.
Since 18th century Tharu people have been continuing their traditional plant use practices, and have become one of the...
generous sources of indigenous knowledge. Manandhar (1985) has recorded 43 drug plants used by Tharus of Dang-Deokhuri district, Western Nepal. Dangol and Gurung (1991) identified 71 medicinal plants used by Tharu people of Chitwan district, Nepal. Similarly, Chaudhary (1994) reported 60 plants species used in the treatment of domestic cattle in Narayani zone. Acharya and Acharya (2009) have found 45 plant species used by Tharu community of Rupandehi district. Singh (2017) has recorded 46 plants used by Tharu community for medicinal and other purposes in Parsa district.

Moreover, various ethnic communities in Nepal are still giving continuation to the use of plants for their living. Uprety et al., (2011) recorded 96 ethnobotanical plants used by Magar ethnic group along the bank of Seti-river, Tanahun. Rijal (2011) reported 435 useful plant species, used by Chepang communities for 485 different purposes in Shaktikhor VDC, Chitwan. Ninety-one plant species found medicinal from Manang (Bhattarai et al., 2006). Similarly, 98 medicinal plant species known from Bantar communities of Bhaudaha, Morang (Acharya and Pokhrel, 2006). Thapa (2012) documented 75 species of medicinal plants used by Magar of Salija VDC, Parbat. Balami (2004) recorded 119 medicinal plants used by Newar community of Pharping village, Kathmandu, Nepal.

The contribution of plant resources to health of rural people is extremely important because more than 80 percent of the population rely on traditional medicinal systems for their health care (WHO 2002; Shrestha and Dhillion, 2003). The useful plants of Tharu community are declined and about to extinct due to continuous habitat destruction, unsustainable harvesting, over exploitation and other haphazard anthropogenic activities (Chaudhary, 1998; Ghimire et al., 2005).

Although, many ethnobotanical studies made in different parts of the country, less concern was made to Tharu community of Sunsari district. Thus, this study was conducted to identify and record the uses of medicinal and other plant of Tharu people in Sunsari district. However, it does not encompass the way of medicine intake and its doses. It might contribute in modern drug synthesis and other manufacture.

**Materials and Methods**

**Study Area**

Study was conducted in four villages of ward no. 2 of Ramdhuni municipality of Sunsari district. It lies on 87º10’ E and 26º42’ N, where altitude ranges up to 185m above sea level. It occupies 0.0098% (14.42 sq km.) area of total area of Nepal (CBS, 2011). The average annual rainfall is 1100mm and extreme maximum temperature was noticed to be 42.5ºC (July 01, 1987); extreme minimum temperature was noticed to be 15ºC (CBS, 2011). Brahmin, Chhetri, Rai, Limbu, Newar, Kami are immigrants and Tharus are the indigenous people of the area. The major vegetation of this area includes Mangifera indica, Azadirachta indica, Artocarpus heterophyllus, Shorea robusta, and Dalbergia sissoo etc.

![Fig. 1: Map of the study area](http://ijasbt.org & http://nepjol.info/index.php/IJASBT)
Ethnobotanical Data Collection
The socio-cultural data were gathered by applying Participatory Rural Appraisal (PRA) technique, to ensure unbiased participation of respondents. Writing was avoided wherever possible, relying instead on the tools of oral communication and visual communication. PRA comprised the interview of 15 people; Old age seniors (>65yrs): 6 people; Farmers: 5 people and Dhamis-Jhankris: 4 people, with at least three respondents from each village.

Herbarium Preparation
Listed plants from interview were collected from the study area with the help of local Tharu people. Mud and excess water were removed, excess leaves or branches were trimmed out to show their parts and pattern clearly. They were then pressed carefully between newspapers, followed by blotting sheets and tied between herbarium-press. They were allowed for natural dry with daily change of drying sheets for 6-10 days. The dry and well pressed specimens were mounted on herbarium sheets of standard size (Lawrence, 1951). The prepared specimen was carefully studied, identified with the help of experts and Protologue. Further confirmation was made by using available literatures (Hooker, 1872-1897; Hara et al., 1978; Siwakoti and Verma, 1996). Well identified herbarium specimens were preserved in herbarium of Central Campus of Technology, Dharan.

Results
Total 37 plant species were reported and enlisted with their scientific name, local name along with other information. Among them, 32 were dicotyledons and five monocotyledons (Fig. 2).

Among 37 plant species, 29 species (78.3%) were used for more than one use category, while only eight species were used for single use category (Fig. 4).

Most of the plants were known for medicinal use followed by fodder, food, firewood, religious and ornamental use. Only one plant was recorded to be used for fiber extraction (Fig: 5).
Similarly, leaves (n=24) were major harvested part of plants followed by stem and entire plants. Barks and flowers are less commonly used parts (Fig: 6).

![Fig. 6: List of plant parts used](http://nepjol.info/index.php/IJASBT)

**Discussion**

This ethnobotanical study revealed high plant use knowledge among Tharu people in Ramdhuni-2, Sunsari district. As similar to previous studies, they were known to be using various plant species as medicine, food, fodder, fiber source, and for religious purposes (Singh, 2007).

Trees and herbs were dominating life forms, which might be due to the reason that most of the medicinal plants are naturally found as herbs with short height and trees being more common timber source (Shrestha and Dhillion, 2003; Uprety et al., 2010). Study was conducted in mid-rainy season, which might be another constraint for enlisting of more herbs. Multiple use purposes of trees and their abundant distribution in forest were controlling growth and number of other life forms (Poudyal et al., 2012; Singh, 2014; Acharya and Acharya, 2009; Bhattacharai and Vetaas, 2003; Uprety et al., 2011).

Most of the species were known with multiple use purposes, while few species with single use. This might be due to the reason that the ethnic Tharu tribe has inhabited since longer time and they prefer to use them for multiple purposes. Uprety et al. (2011), have reported similar result.

Most plants were used as medicine, food and fodder. It might be due to priority for health and food. Also, might due to high abundance of natural medicinal herbs (Shrestha and Dhillion, 2003; Uprety et al., 2010). Finding was supported by previous studies in other areas of Nepal (Shrestha et al., 2003; Uprety et al., 2008) as well as in Brazil (Rossato et al., 1999), China (Weckerle et al., 2006) and other countries. The medicinal use of Acorus calamus, Justicia adhatoda, Amaranthus spinosus, Calotropis gigantea, Aegle marmelos, Azadirachta indica, Centella asiatica, Cuscuta reflexa and Dendrocalamus hamiltonii were previously recorded for various medicinal purposes like fever, for hastening suppuration, jaundice, and stomach pain (Acharya & Acharya, 2009; Dangol & Gurung, 1991). Similarly, Singh (2017) has mentioned the medicinal use of Aegle marmelos, Hibiscus rosa-sinensis, Leucas aspera, Ocimum tenuiflorum and Oroxylum indicum for various purposes like fever, stomach pain, cuts and wound uses, and skin disorder. Additionally, reported the various use of those plants for timber, fodder, food and religious purpose. Leucas aspera was reported in India, being used for boils and blisters (Kumar & Bharati, 2014). Fodder and food were the next important use of plant resources in the study area. They were more knowledgeable about wild plants, since they spent a lot of time in the forest with livestock.

Similarly, leaves were most commonly used part of plant followed by stem and by roots. Barks and twigs of very few plants were useful. It might be due to the reason that leaves is major part of nutrients synthesis and thus higher biochemical activity, which is reason behind using them as medicine, food, fodder and other uses (Poudyal et al., 2012). Acharya and Acharya (2009) and Singh (2017) reported similar results.

The ethnobotanical information recorded here is supported by previously reported findings of various authors (Acharya and Acharya, 2009; Singh, 2017; Shrestha et al., 2003). Thus, it is of higher significance when an identical use of a plant reported from different people of different areas; its reliable indication of their effective properties (Shrestha and Dhillion, 2003; Uprety et al., 2010a). The key informants mentioned about their worries for declining number of medicinal plants due to deforestation and increasing residential area. Due to modernization and easy availability of modern medicine, younger did not participated in PRA. Hence, conservation of knowledge and their detail ecological study might be another possibility for future.

**Conclusion**

Tharu community found to be rich for plants use knowledge for various purposes. Those plants are important source for the health care and social life of tribal people. Dhamis, Jhankris, old people and farmers have sound knowledge about different use of ethnic plants. A wide variety of disease are known to be cured using plants like, diarrhoea, piles, menstrual disorder, pregnancy problem, cough etc. These plants need special attention, which could contribute in modern drug synthesis and other product manufacturer before they are lost or disappear.

**Authors’ Contribution**

Conception, data aquistition, analysis and drafting were done by Sujan Chaudhary and Sanju Parajuli. Analysis and interpretation of data and critical revision of manuscript was done by Gyanu Thapa Magar and Shiv Nandan Sah. Final approval of manuscript was done by all the authors.

**Conflict of Interest**

The authors declare that there is no conflict of interest with present publication.
Acknowledgement
We want to express our sincere gratitude to local people for helping us in collecting ethnobotanical data of various plant species. We want to thank all those experts who helped in identifying unknown plant specimen. Moreover, we are thankful to several authors who had previously researched in the vicinity of this topic.

References
Acharya E and Pokhrel B (2006) Ethno-Medicinal Plants Used by Bantar of Bhaudaha, Morang, Nepal. Our Nature 4. 96-103. DOI: https://doi.org/10.3126/on.v4i1.508

Acharya R and Kamal P (2009) Ethnobotanical study of medicinal plants used by Tharu Community of Parroha VDC, Rupandehi district, Nepal. Scientific World Journal 7: 80-84. DOI: https://doi.org/10.1016/j.scientificworldj.2009.05.056

Bhatt D (1977) Natural history and economic botany of Nepal. Orient Longman.

Bhattarai KR and Vetaas OR (2003) Variation in Plant species richness of different life forms along a subtropical elevation gradient in the Himalayas, east Nepal. Global Ecology and Biogeography 12: 327-340. DOI: https://doi.org/10.1046/j.1466-822X.2003.00044.x

CBS (2001) Population Monograph of Nepal. Kathmandu: Central Bureau of statistics.

Chaudhary R (1994) Plants used in the treatment of domestic cattle in Narayani Zone (Central Nepal). Proceeding of 11th National Conference on Science and Technology pp. 835-847.

Chaudhary R (1998) Biodiversity in Nepal. Bangkok. Thailand: India and Tecpress Books.

Dangol DR and Gurung SB (1991) Ethnobotany of the Tharu tribe of Chitwan district, Nepal. International Journal of Pharmacognosy 29(3): 203-209. DOI: 10.3109/13880289109082879

Ghimire SK, Key DM and Yildiz AT (2005) Conservation of Himalayan Medicinal plants: Harvesting patterns and ecology of two threatened species. Biological Conservation 124: 463-475. DOI: 10.1016/j.biocon.2005.02.005

Hara H, Stearn WT, and Williams LHI (1978) An enumeration of Flowering Plants of Nepal. California: Trustees of British Museum (National History).

Harshberger J (1896) The Purpose of Ethnobotany. Botanical gazette 21(3): 146-154. DOI: 10.1086/327316

Hooker J (2015) The Flora of British India: Arkose press.

Kumar R and Bharati KA (2014) Ethnomedicines of Tharu Tribes of Dudhwa National park, India. Ethnobotany Research and Applications 12: 101-103.

Lawrence G (1951) Taxonomy of Vascular plants. New York: Macmillan.

Manandhar N (1985) Ethnobotanical notes on certain Medicinal plants used by Tharus of Dang Deokhuri District Nepal. J Crude Drug Resource 23(4): 153-159. DOI: 10.3109/13880208509069022

Martin G (1995) Ethnobotany: A methods manual (People and Plant conservation manual). springer.

Poudyal K, Jha PK and Zobel DB (2012) Role of wood water properties and leaf dynamics in phenology and response to drought in evergreen Himalayan tree species. Ecoprint 19: 71-84. DOI: 10.3126/eco.v19i0.9857

Rijal A (2011) Surviving on Knowledge: Ethnobotany of Chepang community from mid-hills of Nepal. Ethnobotany Research and Applications 9: 181-215. DOI: 10.17348/era.9.0.181-215

Rossato SC, Leitaoshilho HF and Begossi H (1999) Ethnobotany of Caicaras of the Atlantic forest coast (Brazil). Economic Botany 53(4), 387-395. DOI: 10.1007/BF02866716

Shrestha KK (1997) Ethnobotanical Inventory and plant taxonomy: Basic approaches for ethnobotanical research. In:Ethnobotany for Conservation and Community development. In: Shrestha KK, Jha PK, Shengji P, Rastogi A, Rajbhandari S and Joshi M (Eds) Proceedings of National Training Workshop in Nepal. January 6-13. pp. 58-65.

Shrestha KK, Tiwari NN, Rajbhandari S, Shrestha S, Uprety Y and Poudel RC (2003) NonTimber Forest Products (NTFPs) in the critical bottlenecks and corridors of Terai Arc-Landscape Nepal: Documentation, utilization, trade and people's livelihood. Kathmandu, Nepal. WWF Nepal programme.

Shrestha PM and Dhillion SS (2003) Medicinal plants diversity and use in the high lands of Dolakha district, Nepal. J. Ethnopharmacology 86(1): 81-96. DOI: 10.1016/S0378-8741(03)00051-5

Singh S (2017) Ethnobotanical study of wild Plants of Parsa district, Nepal. Ecoprint 24: 1-12. DOI: http://ijasbt.org & http://nepjol.info/index.php/IJASBT

Siwakoti M and Verma SK (1996) Medicinal Plans of the Terai of Eastern Nepal. J Econ Tax Bot. Additional Series 12: 423-438.

Siwakoti M, Siwakoti K, Siwakoti S and Karki K (2005) Ethnobotanical uses of plants among Rajbansi and Dhimal ethnic communities of eastern Nepal. Journal of Natural History Museum 22. 41-56.

Thapa S (2012) Medicinal-ethnobotany of Magar Community in Salija VDC of Parbat District, Central Nepal. Our Nature 10: 176-190. DOI: 10.3126/on.v10i1.7780

Uprety Y, Asselin H, Boon Ek, Yadav S and Shrestha KK (2010). Indigenous use and bio-efficacy of medicinal plants in the...
Rasuwa district, Central Nepal. *Journal of Ethnobiology and Ethnomedicine* 6: 3. DOI: 10.1186/1746-4269-6-3

Upred Y, Boon EK and Poudel RC (2008) Traditional use of plant resources by Bankariya ethnic group in Makwanpur district, Central Nepal. Germany: Grin Publisher.

Upred Y, Poudel RC, Asselin H and Boon E (2011) Plant biodiversity and ethnombotany inside the projected impact area of the Upper Seti Hydropower Project, Western Nepal. *Environ Dev Sustain* 13: 463-492. DOI: 10.1007/s10668-010-9271-7

Weckerle CS, Huber FK, Yongping Y and weibang S (2006). Plant knowledge of the Shuhi in the Hengduan Mountains, southwest China. *Economic Botany* 60(1): 3-23. DOI: 10.1663/0013-0001(2006)60[3:PKOTSI]2.0.CO;2

WHO (2002) WHO *Monographs on Selected Medicinal Plants*. Vol. 2. Geneva, World Health Organization.
### Annex 1: List of studied plants species

| S.N. | Scientific Name               | Family           | Life Form | Nepali name/Tharu Name | Parts used | Use category                          | Uses                                                                 |
|------|------------------------------|------------------|-----------|-------------------------|------------|---------------------------------------|----------------------------------------------------------------------|
| 1    | Achyranthes aspera L.        | Amaranthaceae    | Herb      | Apamarga/Ullachichri    | Root       | Medicinal                            | Fever and pneumonia.                                                |
| 2    | Acorus calamus L.            | Araceae          | Herb      | Bojho/Achhaini          | Root, Stem | Medicinal, ornamental                 | Fever, bronchitis, diarrhoea, dysentery and snake bite and Ornamental |
| 3    | Aegle marmelos L.            | Rutaceae         | Tree      | Bel/Bel                 | leaves, stem | Religious, medicinal, fodder          | Leaves for worshipping Lord Shiva, stem in religious purpose, leaves to cure diarrhoea, anti-microbial properties |
| 4    | Alangium salviifolium Wang.  | Alangiaceae      | Herb      | Saharfokha (Tharu)      | Stem       | Medicinal                            | Skin disease                                                        |
| 5    | Alernanthera brasiliensis Hort. | Amaranthaceae   | Shrub     | Aitni/Aitin             | Leaves     | Medicinal, ornamental                 | Cuts and wounds and as ornamental plant                             |
| 6    | Amaranthus spinosus L.        | Amaranthaceae    | Herb      | Lude/Genhari            | Leaves, stem | Fodder, medicinal                     | Leafy vegetables, and juice in menstrual disorder.                  |
| 7    | Artemisia dubia Wall.         | Asteraceae       | Herb      | Titepati/Titapata       | Leaves, stem | Medicinal                            | Avoid bad odour of body, used for scabies, high blood pressures, to check vomiting. |
| 8    | Artocarpus lakoocha Roxb.     | Moraceae         | Tree      | Badahar/Barhar          | leaves, stem | Food, firewood, fodder, timber       | Edible fruits. Firewood, leaves for fodder                           |
| 9    | Azadirachta indica A. Juss.   | Meliaceae        | Tree      | Neem/Neem               | Leaves, twigs, barks | Medicinal, ornamental, fodder          | Skin disease, antiworms, twigs as toothbrush. Fodder.                |
| 10   | Bauhinia vahlii L.            | Fabaceae         | Climber   | Bhorla/Damma            | Leaves     | Religious, firewood, fodder          | Leaves for making plates and fodder, firewood.                      |
| 11   | Bryophyllumpinнатum Lam.      | Crassulaceae     | Tree      | Patharchatta/Magarmaus  | Leaves     | Medicinal, fodder                     | Stone disease, fodders.                                             |
| 12   | Calotropis gigantea L.        | Asclepiadaceae   | Shrub     | Aank/Yak                | Flower, stem, root | Medicinal                            | Wounds, abortion, gastritis,, milk juice for hastening suppuration. |
| 13   | Centella asiatica L.          | Apiaceae         | Herb      | Ghodtapre/Bhatpurain    | leaves, stem | Medicinal                            | Extreme hot to chest and stomach, gastritis.                        |
| 14   | Clerodendrum viscosum Vent.   | Verbenaceae      | Shrub     | Bhati/Bhait             | Leaves     | Medicinal                            | Diarrhoea of cattle. high blood pressures, Toothbrush               |
| 15   | Colocasia esculenta L.        | Araceae          | Herb      | Mane/Kachu              | Leaves, stem | Food, fodder                          | Food called Airkanchan, fodder.                                    |
| 16   | Corchorus capsularis L.       | Malvaceae        | Shrub     | Sanpat/Patwa            | Leaves, stem | Fodder, firewood, food, ornamental, fiber | Leafy vegetables, Santhi as firewood, bark product as fibre         |
| 17   | Conyza bonariensis L.         | Asteraceae       | Shrub     | Son bakas (Tharu)       | Leaves     | Medicinal, fodder                     | Cough asthma and common cold, fodder.                               |
| 18   | Cuscuta reflexa Roxb.         | Cuscutaceae      | Herb      | Amarlati/Amarlati       | Whole plant | Medicinal                            | Joints and bone problems, jaundice.                                 |
| 19   | Cynodon dactylon L.           | Poaceae          | Grass     | Dubo/Duib               | Whole plant | Fodder. Ornamental,                   | Fodder, garland for bridegroom in marriage ceremony.               |
| 20   | Datura metel L.               | Solanaceae       | Herb      | Dhaturo/Jhuthur         | Leaves, flower | Medicinal, religious, fodder          | Dried leaves and dried fruits are anthelmintic for goats. Leaves for curing rheumatism. Leaves and flowers for worshipping Lord Shiva. |
| 21   | Delonix regia Raf.            | Fabaceae         | Tree      | Siris/Siris             | Root, twig, stem | Ornamental, firewood, timber         | Firewood and ornamental tree.                                      |
| 22   | Dendrocalamus hamiltonii Nees and Arn. | Poaceae | Grass | Bas/Bas                  | Stem, leaves | Ornamental, fodder, food, firewood, religious | Young shoot as Food, fodder, household materials |
**Annex 1: List of studied plants species**

| S.N. | Scientific Name | Family | Life form | Nepali name/Tharu Name | Parts used | Use category | Uses |
|------|----------------|--------|-----------|------------------------|-------------|--------------|------|
| 23   | *Hibiscus rosa-sinensis* L. | Malvaceae | Shrub | Raktapuspi/Aurhar | Flower, twig, stem | Medicinal, ornamental, religious | Fever, wounds. Ornamental, and flower for worshipping. |
| 24   | *Imperata cylindrica* L. | Poaceae | Grass | Siru/Fulka | Whole plant | Ornamental, religious | Burning material in earthenware lamp |
| 25   | *Justicia adhatoda* L. | Acanthaceae | Shrub | Asuro/Bakas | Whole plant | Medicinal, fodder | Cough common cold and asthma |
| 26   | *Lawsonia inermis* L. | Lythraceae | Herb | Mehandi/Mehedi | Leaves | Medicinal, ornamental | Leaves for dye purpose. Leaves paste for jaundice |
| 27   | *Leucas aspera* Link. | Lamiaceae | Herb | Dulphi (Tharu) | Whole plant | Medicinal, religious | Flower use in funeral, leaf paste in cuts, wounds, boils. Skin disorder |
| 28   | *Melia azedarach* L. | Meliaceae | Tree | Bakaino/Bakain | Leaves, stem | Medicinal, fodder | Leaf juice for body pain. Antifungal, anthelmintic. Used as fodder. |
| 29   | *Mangifera indica* L. | Anacardiaceae | Tree | Aanp/Aam | Leaves, Fruits, Twigs, stem | Food, firewood, religious, fodder, timber | Fodder, firewood, twigs for religious purpose, edible fruits, furniture. |
| 30   | *Momordica diodica* Roxb. | Cucurbitaceae | Climber | Chatela/Chatel | Fruit | Food, fodder | Fruits are taken as vegetable, fodder. |
| 31   | *Ocimum tenuiflorum* L. | Lamiaceae | Shrub | Tulsi/Tulsi | Whole plant | Medicinal, Religious | Leaf Juice in cough and plants as religious purpose. |
| 32   | *Oroxylum indicum* L. | Bignoniaceae | Tree | Totelo/Patsan | Stem, fruits, leaves barks | Food, medicinal, fodder, firewood, timber | Bark in cuts and wounds, diarrhoea and dysentery, decoction of leaf for curing stomach pain, young fruits and leaves as vegetables. |
| 33   | *Psidium guajava* L. | Myrtaceae | Tree | Ambak/Bilaauk | Fruit, leaves | Food, fodder | Edible fruit, fodder |
| 34   | *Rubia manjith* Roxb. | Rubiaceae | Climber | Padejhar/Ganpasair | Leaves | Medicinal | Leaves to cattle for excretion and in loss of appetite |
| 35   | *Syzygium cumini* L. | Myrtaceae | Tree | Jamun/Jaum | Leaves, fruits | Food, firewood, fodder | Edible fruits, firewood, fodder. |
| 36   | *Tinospora sinensis* (Lour.) Merr. | Menispermaceae | Climber | Gurguj k Lati (Tharu) | Leaves | Medicinal, food, fodder | Jaundice, diabetes rheumatism. Fodder. |
| 37   | *Trichilia connaroides* Wight and Arn. | Meliaceae | Tree | Badbarood (Tharu) | Bark, leaves | Medicinal, fodder, firewood | Antipiles, fodder |