

## ORIGINAL ARTICLE

# OBSERVATION ON PLANTS ASSOCIATED WITH MAGICO-RELIGIOUS BELIEFS AND SOCIO RELIGIOUS OCCASSIONS AMONG THE ETHNIC COMMUNITIES OF KOCH BIHAR DISTRICT, WEST BENGAL, INDIA

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**Abstract:** *The district of Koch Bihar of West Bengal is inhabited by five major ethnic communalities viz Kheria, Oraon, Rabha, Rajbanshi and Santal. All these communities use various plants which are linked with magico-religious beliefs and their socio-religious & cultural heritage. The present study on the subject reports a total of 41 species of flowering plants under 38 genera belonging to 26 families. Out of them 11 species are trees, 6 species are shrubs, 21 species are herbs and 3 species are climbers. A total of 49 uses of plants have been recorded during study among which 30 uses are related with magico-religious beliefs and 19 are linked with socio-religious customs.*

**Key Words:** Ethnic community, Magico-religious belief, Socio-religious, Koch Bihar

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## 1. INTRODUCTION

Plants are associated with the human life since the dawn of civilization. They not only sustain human society by providing food, shelter, fibre, medicine etc but also integrated in social customs and religious believes. In this way plants are inextricably linked with human social life especially in ethnic societies that live in the lap of nature outside urban areas. In many ethnic societies, it is believed that certain trees are inhabited by God and deities, so they worship and protect these trees from generation after generation. As a result, these trees have been saved from being cut down. Besides that, they also believe in magical power of certain plants to cure diseases, protection from evil spirits and other difficulties of life. Moreover, it is difficult to find any social and religious festivals in ethnic communities in which no plant or plant parts or any substance derived from plants is used. But the relationship of plants and ethnic societies in relation to magico-religious beliefs and socio-religious customs are poorly documented. A few works in Indian perspective were published [1-4] in this regard but no endeavor was undertaken to collect the information about plants related to magico-religious beliefs and socio-religious customs from the ethnic communities of Koch Bihar district of West Bengal though a number of ethnobotanical works were published on this district [5-7], hence the work was undertaken.

The district of Koch Bihar is situated under Jalpaiguri division of the state of West Bengal in between 26° 32' 46" to 25° 57' 57" N latitude and 89° 52' 00" to 88° 45' 02" E longitude and covering an area of 3,386 sq Km. The district is surrounded by Alipurduar district of West Bengal in northern and most part of Western side. The Southern boundary of the district is very much indented and is formed by the Rangpur district of Bangladesh. The eastern

boundary is formed by the Goalpara district of Assam. The entire district is intersected by six river systems, namely Tista system, Jaldhaka system, Torsha system, Kalzani system, Raidak system and Gadadhar system. The soil of Koch Bihar district is alluvial type of rather recent origin and is mainly sandy loam type. The climate of the district is characterized by high humid atmosphere and abundant rain with the temperature being seldom excessive. The district receives an average rainfall of 320.1cm. Rajbanshi is the major ethnic community which constitute about 40% population of the district. The other ethnic groups are Kheria, Oraon, Rabha and Santal. Most of them are village dwellers and depend on plant and plant products to maintain their life and livelihood.

## 2. MATERIALS AND METHODS

The present work is based on extensive survey conducted in different areas of Koch Bihar district in different seasons of five consecutive years. Plant specimens were collected from the field and preserved as per standard procedure. Information about local uses of the plants and vernacular names (if any) were procured from the ethnic medicine men and elderly knowledgeable persons of the villages through interview. Correct identity and updated nomenclature of the collected plant specimens were established with the help of published literature and also comparing with the authentic herbarium specimens of Central National Herbarium (CAL).

## 3. RESULTS AND DISCUSSION

Information collected during the field study is presented in table I. Scientific name of the plants are arranged alphabetically followed by family and vernacular names. Mode of uses of plants associated with magico- religious beliefs and socio- religious occasion are presented in detail. Several plants have more than one uses. The following abbreviations are used in the table: Beng- Bengali, Khe- Kheria, Or. - Oraon, Ra.- Rabha, Rj. – Rajbanshi.

**Table1. Plants used by the ethnic communities of Koch Bihar district linked with magico-religious belief and socio-religious occasion.**

| Name of the Plants                | Families      | Vernacular Names                       | Habit | Uses                                                                                                                                                                                                                                                                                                                              |
|-----------------------------------|---------------|----------------------------------------|-------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Acalypha indica</i> L,         | Euphorbiaceae | Muktajhuri (Beng.),<br>Mulinkara (Ra.) | Herb  | Root of the plant(3cm) is tied on the forearm to ally <b>rheumatic pain-Ra.</b>                                                                                                                                                                                                                                                   |
| <i>Aegle mermelos</i> (L.) Correa | Rutaceae      | Bel (Beng.)                            | Tree  | 1. A piece of root of about 3 cm long is collected in naked condition before sunrise on the day of ‘Chaitra Sankranti’ (the last day of the Bengali month Chaitra) and is tied around the neck with the help of white thread to <b>keep off evil spirit – Rj.</b><br><br>2. It is a sacred tree among Hindus. The leaves are used |

|                                           |               |                             |       |                                                                                                                                                  |
|-------------------------------------------|---------------|-----------------------------|-------|--------------------------------------------------------------------------------------------------------------------------------------------------|
|                                           |               |                             |       | in <b>worshipping</b> the <b>gods, goddess and deities</b> .                                                                                     |
| <i>Areca catechu</i> L.                   | Arecaceae     | Supari (Beng.)              | Tree  | Nuts are used for performing rituals in the <b>marriage ceremony</b> of Rajbanshi community.                                                     |
| <i>Artemisia nilagirica</i> (Clarke)Pamp. | Asteraceae    | Nagdena                     | Herb  | Root (3 cm long) of the plant is tied over waist of children to <b>keep off evil spirit</b> – Ra.                                                |
| <i>Asparagus racemosus</i> Willd.         | Asparagaceae  | Satamul (Beng.)             | Herb  | Plant is used in <b>marriage ceremony</b> of Kheria community                                                                                    |
| <i>Calotropis gigantea</i> (L.) R, Br     | Apocynaceae   | Akanda (Beng.)              | Shrub | Flowers are used for <b>worshipping Lord Shiva</b> .                                                                                             |
| <i>Caryota urens</i> L.                   | Arecaceae     | Chao (Or.), Latka (Rj)      | Tree  | It is believed that if the leaf of the plant kept in the paddy field it will <b>protect paddy plant from the attack of insects and pathogens</b> |
| <i>Cordyline terminalis</i> Kunth         | Agavaceae     | Charakmuni (Rj)             | Shrub | There is a belief among the tribal that if the plant is planted near their huts to <b>protect</b> them from <b>snake and thunderbolt</b> .       |
| <i>Curcuma longa</i> L.                   | Zingiberaceae | Haldi (Sant), Halud (Beng.) | Herb  | It is believed that if the flower is tied on the hair the <b>placenta is quickly detached during parturition</b> – Rj.                           |
| <i>Cynodon dactylon</i> (L.) Pers.        | Poaceae       | Durba (Beng.)               | Herb  | Plant is used in different <b>religious and social festivals</b> of different ethnic community.                                                  |
| <i>Cyperus rotundus</i> L                 | Cyperaceae    | Mutha (Beng.), Kasla (Rj.)  | Herb  | Inflorescence is tied in the mammary gland of cow when <b>suppression of milk</b>                                                                |

|                                    |              |                                  |      |                                                                                                                                                                                                                                                                                                                                                                                                                          |
|------------------------------------|--------------|----------------------------------|------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                    |              |                                  |      | takes places after delivery – Rj                                                                                                                                                                                                                                                                                                                                                                                         |
| <i>Desmodium triflorum</i> (L.) DC | Fabaceae     | Kurali (Rj.)                     | Herb | By placing the young twig in the teeth, the Ojha utters some mantras to <b>expel teeth worm</b> . It is generally done in early morning before washing mouth and faces.                                                                                                                                                                                                                                                  |
| <i>Dillenia indica</i> L.          | Dilleniaceae | Chalta (Beng.)                   | Tree | 1. A piece of root is tied by red thread in right arm to cure <b>asthma</b> – Rj.<br>2. Lamp made up by the enlarged calyx is <b>offered to God</b> in ‘Kartick Samkranti’ – Rj.                                                                                                                                                                                                                                         |
| <i>Ficus benghalensis</i> L.       | Moraceae     | Bot (Beng.)                      | Tree | Twig of the plant is used for performing rituals in the <b>marriage ceremony</b> of Rajbanshi. The plant is believed to be <b>sacred</b> and <b>worshipped</b> by the villagers                                                                                                                                                                                                                                          |
| <i>Ficus religiosa</i> L.          | Moraceae     | Aswatha (Beng.)<br>Pakri (Khe.)  | Tree | It is believed by the different ethnic community that the plant is an <b>abode of God and Goddess</b> . So, felling of this tree is strictly prohibited among themselves.                                                                                                                                                                                                                                                |
| <i>Ficus virens</i> L.             | Moraceae     | Pakur (Beng.)<br>Pakrigach (Rj.) | Tree | It is believed that the tree is <b>sacred</b> and nobody will touch the plant at the time of uncleanness. It is a common practice among ‘Rajbanshis’ that at the time of delivery if the placenta fails to come out within half an hour, the father of newborn child goes to a nearby plant (i.e. <i>F. virens</i> tree) and threatens to touch it unless the placenta is delivered forthwith. The man is in uncleanness |

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|                                                |                  |                                               |         | ('chua'), so he will not touch the sacred tree.                                                                                                                                                                                                                                                                                       |
| <i>Flacourtia indica</i><br>(Burm, f) Merr.    | Flacourtiaceae   | Baincha (Or., Sant.)                          | Shrub   | Root (3 cm) is tied on the waist of the children by white thread to <b>keep off evil spirits</b> and it also <b>prevents bed wetting</b> – Sant.                                                                                                                                                                                      |
| <i>Flacourtia jangomas</i> (Lour.)<br>Raeusch. | Flacourtiaceae   | Belakota (Ra.)                                | Tree    | Thorn is tied on the right hand of pregnant lady to <b>keep off the evil spirit</b> – Ra.                                                                                                                                                                                                                                             |
| <i>Heliotropium indicum</i> L.                 | Boraginaceae     | Hatisur (Beng.)                               | Herb    | It is believed that if the plant is rubbed over body of cattle from tail to mouth and the cattle takes smell of the plant the secretion of milk decreases and ultimately stops. To restore lactation plant is to be rubbed over the body in opposite direction i.e. from head to tail end and to be tied on the tail of cattle. – Rj. |
| <i>Hemidesmus indicus</i> (L.)<br>R.Br.        | Apocynaceae      | Anantamul (Beng.),<br>Lodugra (Or.)           | Climber | A piece of root is tied on the neck of children to keep off <b>evil spirit</b> – Or.                                                                                                                                                                                                                                                  |
| <i>Jatropha gossypifolia</i> L.                | Euphorbiaceae    | Andhamuni (Or.)                               | Shrub   | It is believed that the <b>vision</b> will be <b>regain</b> if the blind person or the person having low eyesight worship the plant regularly – Or.                                                                                                                                                                                   |
| <i>Justicia gendarussa</i><br>Burm.f           | Acanthaceae      | Jatra -sisir (Ra),<br>Jatra –Shipad<br>(Khe.) | Shrub   | The leaves are used in the <b>worship of 'Manasa devi'</b> – goddess of snake.                                                                                                                                                                                                                                                        |
| <i>Mecardonia procumbens</i><br>(Mill,) Small  | Scrophulariaceae | Jiwan (Ra.)                                   | Herb    | A piece of root and a flower of 'Haldi' ( <i>Curcuma longa</i> ) is tied on the neck                                                                                                                                                                                                                                                  |

|                                  |          |                                     |       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
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|                                  |          |                                     |       | by a white thread to cure <b>jaundice</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <i>Mimosa pudica</i><br>L.       | Fabaceae | Lajjabati (Beng.),<br>Lajnu (Sant.) | Herb  | <p>1.It is believed that in early morning after bath facing towards north if an expectant mother succeeded to pluck up a healthy plant in a single attempt, there will be <b>no problem during parturition</b> and child will remain alive. – Rj.</p> <p>2.Root of the plant (3 cm) is tied on thigh by red thread as <b>parturifacient</b>. – Rj.</p> <p>3. Root of the plant (3 cm long) is tied around the neck by white thread to allay <b>fever</b> – Khe.</p>                                       |
| <i>Murrya koengii</i><br>Spreng. | Rutaceae | Narshim (Khe., Rj.)                 | Shrub | <p>1.Dried leaves are placed underneath the pillow to control <b>bed wetting</b> by the children during sleep – Rj.</p> <p>2.Shoot is hanged in the door to <b>keep off evil spirit</b>-Rj.</p>                                                                                                                                                                                                                                                                                                           |
| <i>Musa balbisiana</i><br>Colla  | Musaceae | Kalagach (Beng.)                    | Herb  | <p>1.Plant is used for performing rituals in <b>religious festival</b> and <b>marriage ceremony</b> of Rajbanshi.</p> <p>2. It is a practice among villagers that if the mother dies with child in the womb, the body is buried with the child in the womb and a ‘Kalagach’ (i.e. <i>Musa balbisiana</i> plant) is planted on the spot. It is the belief that the of the soul of the mother and child remain in the plant and will not disturb the inmate house. No body should eat or cut the plant.</p> |

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|--------------------------------------------------------|---------------|-----------------------------------|------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Neolamarckia cadamba</i> (Roxb) Bosser              | Rubiaceae     | Kadam (Beng.), Karam (Sant.)      | Tree | The tree is worshipped in ‘Karam festival’ of Santal.                                                                                                                                                                |
| <i>Ocimum tenuiflorum</i> L.                           | Lamiaceae     | Tulsi (Tulsi)                     | Herb | The plant is believed as sacred. Leaves are also used in different <b>religious ceremonies</b> of Rajbanshi and Rabha.                                                                                               |
| <i>Persicaria viscosa</i> (Buch-Ham. ex D. Don.) Nakai | Polygonaceae  | Biskanthali                       | Herb | The infusion of leaf is used in <b>washing the body of cows</b> in the occasion of ‘Go Asthomi’ of Bengali month ‘Chaitra’. Fume is also given in the evening of the very day by the dried leaves of the plant – Rj. |
| <i>Phyllanthus urinaria</i> L.                         | Euphorbiaceae | Choto Narshim                     | Herb | A piece of root is tied on the neck by white thread to cure <b>jaundice</b> – Rj.                                                                                                                                    |
| <i>Piper betel</i> L.                                  | Piperaceae    | Pan (Beng.)                       | Herb | Leaf of plant along with betel nut (seed of <i>Areca catechu</i> ) is offered <b>to welcome a person</b> in their house – a customary of Rajbanshi and Rabha society.                                                |
| <i>Pogostemon benghalense</i> (Burm.f.) Kuntz.         | Lamiaceae     | Lagini (Rj.)                      | Herb | It is believed that the plant <b>prevents entry of snake</b> if planted in four corners of the house – Rj.                                                                                                           |
| <i>Rauvolfia serpentina</i> (L.) Benth. ex Kurz        | Apocynaceae   | Chando (Rj., Ra., Or., Khe.)      | Herb | This plant is generally planted around tribal hut to <b>restrain the entry of snakes</b> – Ra.                                                                                                                       |
| <i>Sansevieria roxburghiana</i> Schult. & Schult f.    | Agavaceae     | Soregach (Ra.)                    | Herb | Fibers obtained from the leaves of the plant are tied in waist to allay <b>rheumatic pain</b> – Ra.                                                                                                                  |
| <i>Senna occidentalis</i> (L.) Link                    | Fabaceae      | Chakar (Khe.), Barachikinda (Or.) | Herb | A little pouch made up of white cloth containing 2 cm long root of the plant, ‘Kala sarisa’ (seeds of <i>Brassica</i>                                                                                                |

|                                           |                  |                   |         |                                                                                                                                                                                                                                                                                                               |
|-------------------------------------------|------------------|-------------------|---------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                                           |                  |                   |         | <i>campestris</i> ) and ‘Tamakpata’ (dried leaves of <i>Nicotiana tabacum</i> ) is tied around the neck of child by red thread to ally <b>fever</b> – Khe.<br><br>2. Root of the plant (3 cm long) and root of ‘Lajjabati’ ( <i>Mimosa pudica</i> ) are tied in the neck to <b>keep off evil spirit</b> - Or. |
| <i>Sesamum orientale</i> L.               | Pedaliaceae      | Til (Beng.)       | Herb    | Seeds are used in different <b>religious occasions</b> of Rajbanshi and Rabha.                                                                                                                                                                                                                                |
| <i>Shorea robusta</i> Gaertn, f           | Dipterocarpaceae | Sal (Beng.)       | Tree    | 1. Leaves are used for performing rituals during <b>marriage ceremony</b> – Khe.<br>2. Flowers are <b>offered to God</b> during ‘Fagua Puja’- Sant.                                                                                                                                                           |
| <i>Smilax perfoliata</i> Lour.            | Smilacaceae      | Panmuthali (Or.)  | Climber | Twig is tied on the wooden or bamboo pillar of ‘Dawa’ (corridor) to <b>prevent entry of ghosts and evil spirit in the house</b> – Or.                                                                                                                                                                         |
| <i>Solena amplexicaulis</i> (Lam.) Gandhi | Cucurbitaceae    | Nakalnaru (Ra.)   | Climber | Twenty-one pieces of roots (in size of 1.5 cm long) are tied around the neck of jaundice patient by white thread in early morning on Tuesday or Saturday as <b>magical cure for jaundice</b> – Ra.                                                                                                            |
| <i>Streblus asper</i> Lour.               | Moraceae         | Sheora (Rj., Or.) | Tree    | Sixty-three leaves of plant crushed with three ‘Lavanga’ (flower bud of <i>Syzygium aromaticum</i> ) and a bit of ‘Atapchal’ (unboiled rice) and pills are made in size of pea seed. One pill is given thrice daily to expel <b>evil spirit</b> from the body of children. – Or.                              |

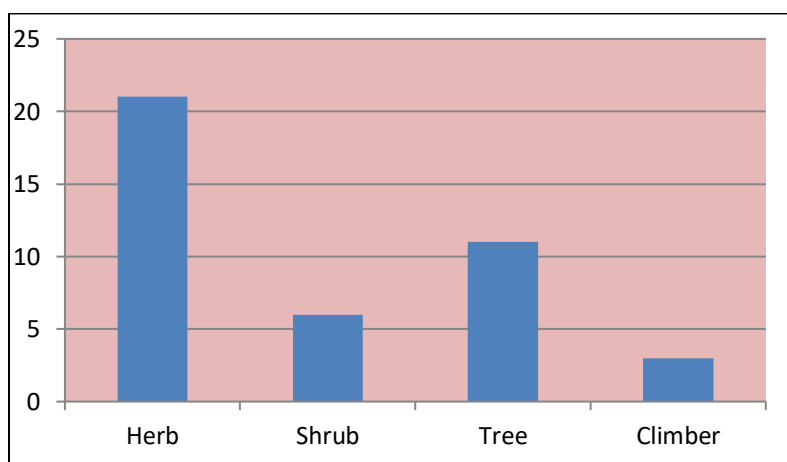


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|------------------------------------------|---------|-----------------------------|------|-------------------------------------------------------------------------------------------|
| <i>Vetiveria zizanioides</i> (Lam.) Nash | Poaceae | Bedinighas (Khe., Binna-Rj) | Herb | A piece of root is tied on the hair of expectant mother for <b>easy parturition</b> – Rj. |
|------------------------------------------|---------|-----------------------------|------|-------------------------------------------------------------------------------------------|

The present study reveals that 41 species of flowering plants under 38 genera belonging to 26 families are associated with magico-religious belief and socio-religious occasion among the ethnic communities of Koch Bihar district (Table2). The maximum numbers of species have been recorded in the family Moraceae (4 spp.) followed by Apocynaceae and Euphorbiaceae (3 spp. each.). Out of total plants there are 11 species of trees, 6 species of shrubs, 21 species of herbs and 3 species of climbers (Figure 1)

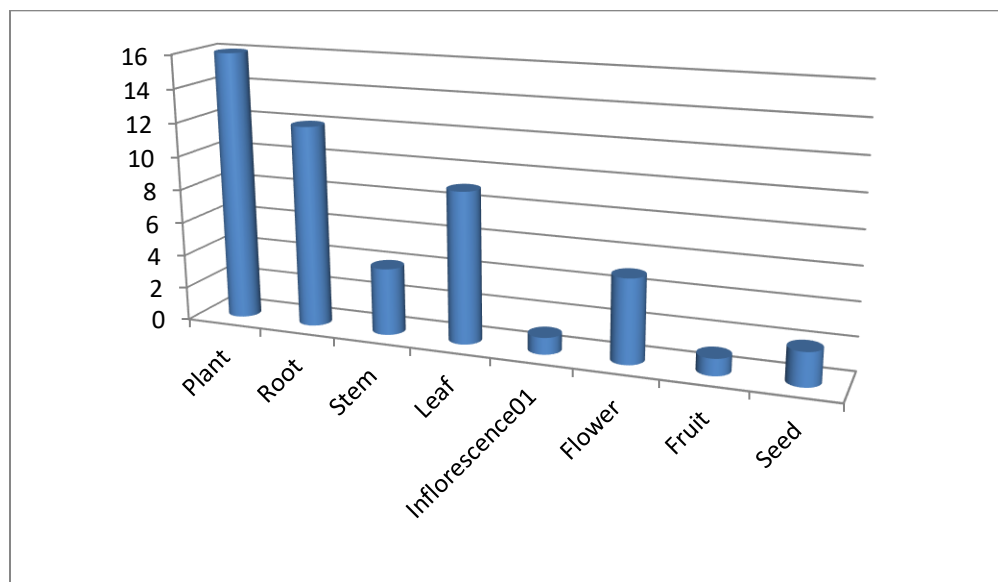
**Table 2. Conspectus of different taxa**

| Taxa     | Dicotyledons | Monocotyledons | Total |
|----------|--------------|----------------|-------|
| Families | 18           | 08             | 26    |
| Genera   | 27           | 11             | 38    |
| Species  | 30           | 11             | 41    |



**Figure 1. Utilization pattern of different groups of plant linked with magico-religious belief and socio-religious customs.**

A total of 49 uses of plants have been recorded during study among which 30 uses are related with magico-religious belief and 19 are linked with socio-religious customs. It is also noticed that the ethnic communities use whole plant or different plant parts in various purposes. Plants itself are used in 16 cases followed by roots (12) and leaves (09).



**Figure 2. Use frequency of different plant parts in relation to magico-religious belief and socio-religious customs.**

It is evident from the study that there is strong believer of ghosts or evil spirits among the ethnic communities, therefore to keep off evil spirits away from themselves they use specific plants or plant parts. They also believe in magical power of some plants to cure different health problems like rheumatic pain, jaundice, easy delivery, bed wetting etc. Since most of the ethnic people live in rural areas, snakes are more likely to enter their residence. That's why they believe in the power of some plants like that *Pogostemon benghalense* and *Rauvolfia serpentina* if planted around their house; they will be protected from snake infestation. It is also noticed that in various religious and social festival the aboriginal people use leaves, flowers, seeds etc for worshipping as well as for performing rituals associated with their tradition. They also consider *Aegle marmelos*, *Ficus benghalensis*, *F. religiosa*, *F. virens*, *Ocimum tenuiflorum* as abode of God, so they worship these plants in various occasion and protect these plants from being cut down. Through this religious ritual, efforts are made to preserve these trees in their communities.

## 5. CONCLUSION

It is clear from the present study that the plant resources are not only the source of food, medicine etc among the ethnic societies of Koch Bihar district but they also equally linked with socio-cultural or religious rites, without which their cultural heritage is incomplete. They also have their own conservational practices to protect plants which they considered as sacred or useful for socio-religious practices. But due to cleaning of natural vegetation for urbanization and gradual modernization of ethnic societies the traditional knowledge about the uses of plants which they gathered generation after generation are under threat. Most of the information are verbal and they do not have any written document about their beliefs, rituals and practices. The present documentation may help the other researchers who intend to study the socio-religious-cultural aspect of the ethnic communities of Koch Bihar district in future.

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