

Trading Activity and Ethnodomestication of Plants by Manipuri Muslims

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Abstract

Long distance traveling and trading activity of Muslims from great antiquity brought plants into Manipur (Indo)-Burma-China region. The indigenous traveling vehicles, horses needed poppy as their essential medicinal food as well as horse diet. Some words such as- Turushka, Pasha (Pasa), Pangal, Pathan, Mangal, Mughal, are found to be synonymous with the word Muslims and these words were associated with the plants. Ethno-domestication of 18 (eighteen) plants in their kitchen garden, flower garden, courtyard, fields, orchards etc, was found. Survey of literature couples with field survey was carried out with an aim to understand the sustainable use of bio-resources. Uses of plants among Manipuri community in various purposes were known to this community. To this aspect, an approach of traditional plant stalk conservation is observed from time immemorial.

Keywords: ethno-domestication, plants, conservation, Muslims, Manipur

Introduction

We find reference of the presence of Muslims and trading activities in the 8th century in Bengal (Eaton, 1997) and Assam (Milne, 1987), about turban wearing *Pangals* (Muslims) at Lilong (present Lilong is thickly populated by Muslims) by the time of Poireiton (810-850 AD) (Singh, 1979; Singh, 1986), or early half of the 9th-10th century (Singh, 1987), and about agricultural activity of *Pangals* (Muslims in Manipur state, India) near the Khuga river during the time of Moirang king Yiwang Puriklai (1312-1381 AD) (Kabui, 1991).

Arab colonists and settlers in small numbers are found in Bengal much before 1200 AD (Eaton, 1997). Muslims ethnic groups Pathan and Pasha (Pasa) were found in Manipur valley during the generation of legendary king Kangba (Singh, 1992a; Meramacha, 1997) who physically lived in Manipur in the 11th century (Singh, 1986). One Muslim saint was noted to have preached in Manipur during the reign of king Naophangba (764-794 AD) (Parijat, 1917) and King Irengba (1107-1127 AD) (Parijat, 1917) and many people followed his faith (Kokngangsana, 1955; Singh, 1992a). Muslims reached into Manipur from the direction of Sylhet by the 8th century AD (Ahmed, 1997). From great antiquity Musalmans have formed part of the population of the valley as well as Hindus. The Muslims were provided Manipuri women for their wives (Brown, 1975).

About Muslim settlement in Manipur, a section of scholars believed in the record of *Cheitharol Kumbaba* (Royal Chronicle) (Singh and Singh, 1989), that starts the settlement during Khagemba period (1597-1652) (Khan, 1972; Kabui, 1991; Singh, 1992b). The settlement before

this is also recorded (Kokngangsana, 1955; Singh, 1992a). The authors in this paper have given more attention towards the plants referring to Muslims in connection with their trading activity and ethnodomestication of plants found in various sources.

Materials and methods

A literature survey couple with field work during the period Feb. 2005- Dec. 2008 for collection of information from a number of learned persons and the old persons numbering 80 from 4 Muslim villages which contain 16 Mohalla (1 Mohalla has around 30 to 40 houses) was carried out. Searching of plants in connection with Muslim community of Manipur state formed the basis of this research work. One old Manipuri literature *Leiron* (lore of native beautiful flowers and plants (Singh, 1972) is a very authentic book. It was written during king Charairongba (1698-1709). There has been a tradition of singing folk-song, likewise the book is totally of the song of plants in old Manipuri language. The modern Manipuri language is much developed, which differs from the old language that being a problem to the authors in the initial stage of this research work. *Leiron* helped in collecting information, database analysis, and in identifying the plants mentioned in the book itself. Help of the knowledgeable persons particularly of old persons were taken to identify the plants in the field. The informants mostly belong to Muslim community. A large number of literary sources made it possible to make plants related to this community.

There is another old literary creation entitled *Leithak Leikharol* (Singh, 1959) that was written during King Garib Niwaz (1709-48). This gives various synonyms of

the word Muslims, for example, Pashas as Turuskas (Turks) (Singh, 1959) and the word Pathans to Afghans (Saikia, 1986). Muslims inhabitants were also called Pashas (Pasis) in Manipur (Singh, 1989), later called Pangal (Singh, 1986). It will be seen that the Muslims in Manipur are being related to 18 plants in study and these plants might have been mostly brought from Brahmaputra valley and Surma valley (now in Bangladesh) (Gerini, 1909; Singh, 1972; Singh, 1986). The plants in study have been named in Manipuri (Meiteilon), a Tibeto-Burman language and have since become an integral part of Manipur flora. In this perspective 18 plants are studied and analyzed in Muslim context.

Results and discussion

The eighteen (18) ethno-domesticated plants are:

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|--------------------------|-------------------------|
| 1. Morok | 10. Kani |
| 2. Kusumlei | 11. Mangal hawai |
| 3. Sagol hawai | 12. Senbi Makak lei |
| 4. Peruklei or Petruklei | 13. Chu |
| 5. Heinou | 14. Chuwa chandan |
| 6. Bokul | 15. Sangai yata lei |
| 7. Namku pasa lei | 16. Takham tonu Sanarei |
| 8. Naoyoklei | 17. Kwaklei |
| 9. Hidakmana | 18. Chujag |

Eighteen ethno-domestically related plants described below are presented with the relevant information. Taxonomical position of plants including scientific name, local name have been examined and these have been properly recorded.

1. *Capsicum indicum* L.; Family- Solanaceae; Local name- Morok

It was introduced in Manipur by Muslims during the reign of Khagemba (1597-1652). Chillies originated in the West Indies. The Portuguese introduced it into India. It spread to East Bengal from where it was brought to Manipur valley (Singh, 1992b). It is regarded as a spice and found to be cultivated on a large scale. A green or dry fruit of chilly is a necessary component in the preparation of local dishes as Iromba, Singju, Kangsu (Singh *et al*, 2001). Muslim kitchen garden without chilly is not reported. This plant belongs to South American centre of origin (Peru-Chile). This is agriculturally related and it is also a kitchen garden plant.

2. *Carthamus tinctorious* L. Family- Asteraceae; Local name- Kusumlei

It is a flower originated from the land of the Pangals called Kusum (Pangal kusu khullen), also called earlier as Mangal-lei widely popular during the reign of king Khunjaoba (1652-66). The meaning of Lei is flower. It grows in dry soil. The plant is described to have leaves look alike of teeth of a tiger (Panba keiya manba) and the flower as the jewels of gold (sana leitreng manba). This is the flower

that grew first in Kusum, land of the Musalmans (Singh, 1972). In 1661 in the Manipur month of Poinu (December roughly) some Mughals known to the Manipuris as the Mangals visited Manipur (Singh, 1992b). Kusumlei is also known as Kunsumlei (Mangang, 2004). Once popularly grown in the gardens of Muslim villages, the flower of the plant has its market demands, served the purpose of Meitei community in various socio-cultural, socio-religious activities such as at the time of Cheiraoba (Manipur New Year). The later community uses the flower for colouring the clothes. "Vavilov (1951) proposed three centres of origin i.e. India, Ethiopia, and Afghanistan for this plant" (www.nariphaltan.org). This is a garden plant.

3. *Dolichos biflorus* L.; Family- Fabaceae; Local name- Sagol-Hawai

This variety was originally brought by the long distance traveling Muslim traders and geographers, who brought along this horse diet for their precious animals, and later on, it was available in large quantities, and mainly the poor section of people utilized this as their staple food (Watt, 1890; Lebar *et al*, 1964). Due to the activities of this trans-Asia traders all the way from Egypt, Turkey, Persia, Afghanistan to North east India, Indo-China region and Yunan, this horse gram is found across the tropical and sub-tropical Himalaya, to Burma and Ceylon (Watt, 1890) and mentioned in Manipur history with reference to Muslims (Singh, 1992b). Sagol hawai thongba is a common curry deliciously prepares in Muslim marriage meal and in offering meal to invitees dedicated to a deceased person known as Mangam touba or Sherni touba. Horse gram is native to the old world tropics. Cultivation of this plant in India is recorded since prehistoric time (books.google.co.in). This plant is agriculturally related.

4. *Hydrocotyle sibthorpioides* Lam.; Family- Hydrocaritaceae; Local name- Peruk lei or Petruklei

It is a flower originated in the lands of Pangals (pangal matampakta), then it is believed to have grown in "the first Pangals valley called Lilong of Manipur" (Chaudhary, 1976) and then might have spread to other villages of the state i.e. Chothe yangbi, Pangal Siphai. The plant is known as Pangal Nuhi Lei (pangal tharuk nuhi lei) called so after a place Nuhi in Bengal. The characteristics attributed were that the leaves look like dog tongue (yanglei taoba huirei manba) and the flowers like bristles in a toothbrush (porong yathin manba). The clothes of women have the shape of the plant embroidered (Singh, 1972). Centre of origin is assumed to be at South America (angfaql.org.au). The plant is found at foot path sides, road sides, gardens, lawns etc.

5. *Mangifera indica* L.; Family- Anacardiaceae; Local name- Heinou

It was introduced to Manipur by one Hakim Safar Muhammad alias Khamba during the reign of king Khagemba.

He once went to Sylhet to take his sister Jainab as he came back, he brought the seed of Mango came to be known as Maiba hei (Rahman and Kayamuddin, 1986). The fruit has long been considered a valuable medicine both by Hindus and Muhammadan physicians and it is a native of the South Asia or the Malay Archipelago i.e. Hindustan centre of origin (Watt, 1972). The old wood (stem) is used for making Sumbal (wooden mortar for grinding paddy grains). Mango orchards are found at front, side, backyard of many houses.

6. *Mimusops elengi* L.; Family- Sapotaceae; Local name- Bokul

It is a flower that was gifted to Manipur from the land Pasha or the land of Pashas (Singh, 1972). It is noted that Pasha (Pasa) is modern Sylhet (Singh, 1996). The flower of this plant was once used in the garlands for a purpose of garlanding on the marriage day. Youths of both the sexes used to like it. Nowadays the plant is not much prevalent, being rare. This plant is domesticated as sideyard, front-yard plant. This is an indigenous plant (biodiversityinternational.org).

7. *Namku Pasa lei*

It is again a flower originated from the land of Pasha (Namku pasha lei o koubadi) (Singh, 1972) as it is known from the name of the plant itself.

8. *Naoyoklei*

It is another flower brought from the land of Pangals (also known as Nuhi lei) (Pangal matampak tharuk nuhileigi singlen mapan phukna purakpa lei) in Bengal, as a seedling. First it was planted in the sandy soil. Frequent watering is a necessary component for proper cultivation. It is a fragrant (leirang manam chaoba) plant commonly grown near the river bank.

9. *Nicotiana rustica* L. and *N. tabacum* L.; Family- Solanaceae; Local name- Hidakmana

Muslims might have brought this species of Tobacco which was subsequently found in Manipur also. This species is cultivated also in Kuch Behar, Rangpur, Sylhet, Cachar and other parts of East Bengal, Assam and Manipur (Watt, 1891). Mughal phoo (Mughal pot) was imported and Tobacco smoking was started by 1610 under Muslims (Singh, 1992b). Every house had one Mughal phoo or Hookah or Hidakphu for smoking Hidakasuba (processed tobacco taken from plant parts i.e. old bud, petiole, etc.). The Tobacco parts are taken for pounding to make it finally consumable. More to pound the parts, more is the taste. Hidakasuba is taken in a Kankar (earthen Y-shaped vessel) over which a lighted Tikki (a round shape around 3-5 inches in thick structure made from crushed charcoal, molasses, ash of plantain spathe mixed with water by drying in the sun) is taken. Kankar is connected to a bulbous shape coconut shell containing half filled water through

a hollow wooden connective. When Tikki starts burning Hidakasuba, a man is prepared to puff the smoke through the hole over the coconut shell. Water in the Coconut shell believes to absorb the materials causing ill effects from the smoke. People in Manipur use Hidakphu while taking rest. People chew Tobacco sold in the market called Khudap comprising around 20 dried leaves in a bundle. The plant belongs to Peru-Chile centre of origin. This is agriculturally related and found in the fields.

10. *Papaver somniferum* L.; Family- Papavaraceae; Local name- Kani

Muslims started to cultivate some quantity of poppy and Meiteis too grew poppy in Manipur state (Allen, 1905; Lebar *et al*, 1964; Singh, 1992b). Poppy is largely used for anesthetic purpose and Muslims muleteers (horse-riding traders) (Lebar *et al*, 1964) probably needed some quantity of poppy as horse diet, other than Sagol-hawai (horse gram). The present day Manipuris give the bamboo leaves, paddy straw, *Echinocola stagina* Retz., *Cynodon dactylon* (L.) Pers. to their horses. Horse in Manipur very fondly eat *Echinocola stagina* (Hoop in Manipuri), *Cynodon dactylon* (Tingthou in Manipuri). For overall good health, *Tinospora cordifolia* (Willd.) Miers ex Hook.f. & Thoms. (Ningthoukhongli) is given to the horses. A plant *Pteridium aquilinum* L. (Kuhn.) (Lai chakhrang in Manipuri language) put into the nose of horses to cure them suffering from coldness, a symptom of hair standing that may be due to laziness a phenomenon called Makokta eshing haigatpa. For proper digestion, horses are given Black salt. *Vitex negundo* L. (Urikshibi) is given to the horses for it is believed to be anthelmintic. Farmers are helpless with a disease called Ewanglai (a rot, lesion combining bleeding in the skin which ultimately causes death of horses). With an early detection of Ewanglai and applying of paste of Mustard seed, Tobacco leaves and with Chuhi (molass) may in few cases cure it. Poppy belongs to China and Asia Minor centre of origin. A white wild species is spotted.

11. *Pisum sativum* L.; Family- Fabaceae; Local name- Mangal Hawaii

This variety was brought by the Mughals known to Manipuris as Mangals and a Mangal mayum (Mangal clan) named Tomba cultivated this plant in his garden in 1791 (Singh, 1992b). This may be connoted to the activity of Kabuli traders, since a white or Kabuli variety of *Pisum sativum* L. was reported from Bengal (Watt, 1892). An interesting feature in the year 1892-93 was the presence of a large number of Kabuli traders in the main market of Manipur (Basanta, 1998). Muslims conveniently use seeds of this plant for a prayer function Lik chatpa or Wazifah (prayer function of a dead person). For this purpose 10,000 such seeds are kept in readiness in some houses. Within a group of people sitting together each seed is used for counting the numbers of prayers. This group while counting all the seeds, the same is repeated so as to

complete 70,000 of prayers (Ahmed and Singh, 2007). It is commonly cultivated plant, related to agricultural activity of this community. This belongs to Central Asia centre of origin.

12. *Plumbago indica* L.; Family- *Plumbaginaceae*; Local name- *Senbi Makak lei*

It is a flower that originated from a particular Pangal place called Makak (Sylhet now in Bangladesh and Cachar region of Assam State of India) in the west of Manipur. It was brought as a young seedling with soils attached to the root. Morphologically it has dog tongue like leaf (mana taoba huirei manba) and flower is tubular (mapan pere manba), oblong, etc. It was recorded that the fragrance of the plant is said to spread across the rivers and the maidens used to place the flower of this plant in their hair. It is regarded as beautiful plant and is grown around many a houses. Makak lei is the present name of this plant. This originates from India and South East Asia (database.porta.org). This is also a plant of frontyard, courtyard, sideyard, flower garden, fields, etc.

13. *Saccharum officinarum* L.; Family- *Poaceae*; Local name- *Chu*

This plant was included to have been presented to the Meitei king Jai Singh (1822) by a Muslim, Tomba (Singh, 1992b). Making of Chuhi (molass) which was seen in every locality is restricted only to some villages. In this preparation extraction of juice is done by using wooden tools. Juice thus extracted is boiled 9 to 10 hours till it turns to yellowish colour. The final product is known as Chuhi which, Manipuri's eat with rice. Also, it is used to prepare various eatable items. Very fondly, the plant is grown around many a houses, fields, courtyard, home garden, etc. This belongs to Indo-Burma centre of origin. This is not only frontyard, sideyard plant but also an agriculturally related plant.

14. *Santalum album* L.; Family- *Santalaceae*; Local name- *Chuwa Chandan*

It is a flower that came to Manipur during the time of king Mungyamba (1562-97). It was said to be growing in the banks of Sankhu (Pangal sangkhu itamba) in Bengal. The flower was described to have two clear halves. Meitei king Mungyamba is associated with this plant. Burmese rulers used this flower in the jewels. It is a fragrant plant and a kind of durable plant (Chuwa chandan leinungsina laija samudra echaoda leirang manam chaorakle) that insects very seldom attack it. Meiteis used the rubbed extract of this plant as marker on their forehead. China is the chief market for Sandalwood from India. Sandalwood oil is transparent, but of a pale yellow colour, and is one of the most favoured of Indian perfumes, especially among Muhammadan gentleman (Watt, 1972). It is the native of the highlands of south India and the Malayan Archipelago. This is spotted at roadsides.

15. *Sangai Yata lei* or *Sangkhu Itam lei*

Sangai Yata lei (Sangai-a house, Yata-dwelling, Lei-a flower) is a flower that was probably first grown around the first Muslim house in Manipur. It is originated in the west, land of Pangals or Pangan Sangkhu Khullen (village name) (Pangal sankhu khullenda panba lei, or sankhu etam lei). The morphological feature of the plant was described to have leaf look alike of a dog tongue (mana taoba huirei manba), flower that of flutter of Yendang (*Cycas pinnata* Ciff.) (mapan sinou Yendang manba) and it is a fragrant plant (Singh, 1972).

16. *Tagetes erecta* L.; Family- *Asteraceae*; Local name- *Takham tonu Sanalei* or *Sanarei*

It is originated from the land of the Pangals (Pangal matampaktagi thoklakpa leine), which was carefully brought to Manipur under protection from heat of the sun to prevent it from decaying. It is also known as Nuhilei. A Moirang soldier first grew the plant very carefully. His one daughter Akham Tonu took care of the plant and hence the name of the plant. She very fondly embellished (thetnakiye) the flower. The flower of the plant is offered to family deity by Meitei community (Singh, 1972). The present name of this plant is Sanarei. This belongs to Mexico centre of origin (desert-tropicals.com). This is spotted at sideyard, frontyard, fields, and flower garden plants.

17. *Vanda coerulea* Griff.; Family- *Orchidaceae*; Local name- *Kwaklei*

Leiron allegorically describes Kwaklei as having three petals with the first petal signifying a brave Mughal king, the second a spotted tiger and the third petal with a legendary Meitei king Kyang or Kyamba. The plant usually grows on the other plants i. e. an epiphyte (Singh, 1972). Presently it is seen growing on Mango and bottle brush around many a Muslim houses. *V. coerulea* Griff., *V. strangeana* Rchb.f. (Kwaklei nakonbi), *Vandopsis parishii* Rchb.f. (Kwaklei nathabi), *Renanthera imscootiana* Rolfe. (Kwaklei Angangba) are some of the orchids out of many reported from Manipur (Jojita, 1986). Orchids are indigenous to tropical and semi tropical regions of the world such as Asia, South and Central America. Some are native to the UK (flowers.org.uk).

18. *Zea mays* L.; Family- *Poaceae*; Local name- *Chujag* or *Chuga-jag*

Chuga-jag or Chujag (the rice of yogis) first appeared about Langban (September), 1683 as per Cheitharol Kumbaba (Royal Chronicle). Maize is a native of South America (South American centre of origin) brought to Europe by the Spanish which reached further to India. Maize was introduced into Manipur from the Mughal Empire (Singh, 1992b). Maize is taken as breakfast food at home and it is regarded as energy giving food. This is taken

to fields to eat while working. Muslims are cultivators of Maize. This plant is agriculturally related and also found at kitchen garden.

Among the eighteen plants which are of relevant for ethno-botanical studies, poppy is believed to be flora which was brought to Manipur and beyond by the Muslims. Subsequently, poppy mainly for medicinal, anesthetic and horse diet substitute was planted in Manipur too in small quantity. Poppy was brought originally from Asia Minor, Turkey by the Arabs and Afghans who came by sea and land for trading in various items that included horses, some other plants hereby as Poppy, Horse Grams, etc. (Watt, 1892). We need to understand more of present aspect for better explanation.

Muslims carried poppy and horses to Burma and Southern China. It is found that the early Meitei kingdom maintained trade route that led to upper Burma region of Shan and Pong, and further to Yunnan in South west China. "Muslims in China are called Hui. Muslims in Thailand are called Ho, etc. In Northern Burma Muslim are called Pansi" (Singh, 1989). Similarly Muslims in Manipur are called Pangal.

Previous to the Tang dynasty (618-907 AD), the poppy was apparently not known to the Chinese. The Arabs had been trading with China for at least a century. After the Arabs introduced the opium in China and then the Chinese learnt this art of cultivation especially from Assam. The three most consuming provinces of excise opium may be said to be Burma, Assam, and Bengal. Perhaps the most noticeable feature of the Indian provincial consumption is in the increasing traffic with Burma, a fact which is doubtless largely due to Chinese influence and Chinese immigration (Watt, 1892).

The well known Chinese Muslims muleteers (steady horse riders) of the Burma-China frontier area are known locally by the Burmese term Panthey (Panthe or Panthee). The Panthey and a few Shans are tolerated as middleman in the opium trade. Meiteis in Manipur too planted opium plants (Lebar *et al.*, 1964). This indicates that Muslims from Manipur used to travel to Shan and Yunnan region by horse and traded in opium there. Muslims in the early links with China can be noted of, Avicenna, other name Abu Ali Ibn Sina (980-1037), author of Canon of Medicine. He was the most famous physician of the day, but perhaps the most unusual herbal connection was made a century before his time by Ibn Cordoba (850 AD) an intrepid Arab seafarer, who brought Ginseng root (*Panax pseudo-ginseng* Wall.) from China to Europe (Prajapati *et al.*, 2003).

Afghan traders also came to Manipur for trades and proceeded to Shan (Burma) regions. Regarding various trade routes, Harvey in his History of Burma described a route between China and Afghanistan which runs ".....the third (route) down the Chindwin river and through Manipur, took the caravans three months journey to Afghanistan where the silk of China were exchanged for the gold

of Europe" (Singh, 1987). Afghans are Kabuli traders continued their merchandise activity many centuries later.

Regarding the late introduction of horses in Manipur this is recorded that in 1839 the Raja was presented with an Arab stallion and eight Mares, but the Arabs can't thrive in the damp climate of Manipur and the imported stocks died out. These early traders used some opium as food capsules for horses. Poppy was almost a necessity of life, and so much faith do the people place in the drug that they by no means infrequently give it to their horses when an exceptionally heavy task was to be rendered (Allen, 1905).

Also, an interesting feature in the year 1892-93 was the presence of a large number of Kabuli traders in the main market of Manipur (Basanta, 1998). There are Pathans and Mughuls among the Manipur Muslims (Singh, 1992a). Manipur Muslims are mainly Indo-Afghans origin (Singh, 1986). Muslims had been in Manipur during the reign of King Naophangba (764-794 AD) (Kokngangsana, 1955; Singh, 1992a) from the preaching of a Muslim saint (Guru), the first Muslim clan name being Aribam (Singh, 1989; Paratt, 1995). This saint and his group are believed to have brought the earliest flower plants as Sangai Yata lei or Sangkhu Itam Lei originated in the westland Surma valley and Brahmaputra region of Pangals, Pangal Sangkhu Khullen (a Muslim village name) is also specifically noted. These sources indicate that Muslims ethno-domestication of plants in Manipur started along with their settlement.

The plants analyzed in the present context are associated with Muslim names in Manipur of earlier times as-1. Pangal, 2. Makak, 3. Mangal 4. Pasha (Pasa) 5. Pathan, etc. Pangal Musalman phrase is used in Puyas (Kokngangsana, 1955), (Singh, 1992a), (Heirangou, 1993) since the reign of Naophangba (764-794 AD). So the word Pangal stands for the Muslims. There is connection of Muslims in Manipur with the descriptions in the Sylhet region also. It gives an insight into the study of plants more in connection with the ethnic Muslim community of their origin, settlement, trade links and domestication of plants found in the historical records. It is also possible that the plants fulfilling the material needs of a section of human society in Manipur might have attracted the plants. Long distance traveling and trading activity of Muslim community for making connection to the people of different country may be a contributory factor of plants.

Makak today in Manipur is an ethnic Muslim clan name who is noted to have come from Makak (Sylhet now in Bangladesh and in Cachar region of Assam state in India). During Khagemba's time (1597-1652) reference is made to a Makak road meaning a road to Makak that described probably of Makak ethnic Muslim clan (Kabui, 1991). There are 62 Muslims related clans recognised in the palace of Meitei kings (manipurda leiriba pangals-ing asigi yumnak asi punna 62 rom sui) (Kumar, 1998). The word Makak is related to the plant Senbi Makak Lei (*Plumbago indica* L.) which was originated from a particular Pangal place called Makak in the west of Manipur. In

1661 in the month of Poinu (December), some Mughals known to the Manipuris as the Mangals visited Manipur. Likewise the word Mangal is associated with the plant Mangal Hawai (*Pisum sativum* L.) which was brought to Manipur by the Mangals (Mughals). Earlier there was a Muslim clan name Mangal mayum. A Muslim named Tomba of Mangal Mayum presented the king Jai Singh (1822) some products from his garden including Mangal Hawai among others (Singh, 1992b).

The word Pasha/Pasa is related to the plant Bokul (*Mimusops elengi* L.) which again was gifted to Manipur from the land of Pasa by the inhabitants of Pashis, (Singh, 1972). Another flower Namku Pasha Lei is again a flower that originated from Pasa and brought by the Muslims. Relating to this, the story of Sylhet (Pasa) region is noteworthy. Ibn Batuta (b. 1304-1378 d.) traveled 44 modern countries in 25 years and finally visited Sylhet or Pasa in 1345 (Gibbs, 1983). Ibn Batuta proceeded to Kamru hills by the streams of Surma (Barak) river and visited to reach Habung near a blue river. Habung is identified as Sylhet (Eaton, 1997). Habung is also known as Jabanak (Lee, 1829) and Ibn Batuta in his memoir Rehla calls the ruler of Pasa as Malik- al Zabij (Richards, 1970). Ibn Batuta during his journey recorded using of Mango (*Mangifera indica* L.) as pickles in India. Also in the records of Cheitharol Kumbaba (Royal chronicle) (Singh and Singh, 1989) and Gogoi (1971) identifies this Pasa as the Basa, capital of Cachar noted by Pemberton (1966) as the Basa king, which probably means Banga the ancient capital of Cachar country. In the year 1606 prince Sanongba contacted Muslim soldier in Sylhet to dethrone his brother king Khagemba. Meiteis in Manipur Kingdom knew Muslims in Sylhet and Cachar region in the pre-Khagemba period (1597-1652) (Singh, 1986).

The record of Manipur folksong regarding lore of native beautiful flowers appeared in the 17th century in the form of a book Leiron which is a testimony to Muslim ethnodomestication of plants as it bears Muslim synonymous words; Pangal, Makak, Mangal, Pasha, etc. The book is contemporary of John Ray (1628-1705) whose classification of plants was mainly based on form and gross morphology of plant structures. Folk singers particularly from Meitei community recorded the exotic plants. In the record of folk songs of Manipur, it is observed that there is a scientific description of the plants that is shape and size of leaves, flowers, seeds, habitat, natural beauty, etc. This in one way helps in identifying the plants. The plant for example Kwaklei is identified an orchid plant as it is known from the colour of the flower described in the book. The colour of this flower (petal) is similar to that of spotted tiger. This grows on other plant that is indicative of an epiphytic plant. Some plants, i.e., Sangaiyatalei, Naoyoklei were described as to carry fragrances. It is inferred that these plants might belong to *Oleaceae* family. The most significant part of Leiron is to have descriptions of plants in association with some kings who ruled in Manipur. It

gives us dating of a particular plant arriving in Manipur. Whereas for some plants i.e., Naoyoklei, Sangaiyatalei, and Namku Pashalei, the exact identity is still illusive due to lack of proper descriptions. It is deserved to conclude that the folk singers possessed scientific temperament to differentiate the plants.

Men move from place to place in search of food, better dwelling places, etc. This has been his tradition from time immemorial. Cultural exchanges have been taking place. Give and take among various tribes, communities has become a rule of nature. Plant domestication along with various activities (Ahmed and Singh, 2006; Ahmed and Singh, 2008) of Muslim communities in the North-eastern region of India particularly in Manipur state is relevant. The trading activity and domestication of plants by Manipuri Muslims in the state can be viewed with the observable acts of sustainable use of bio-resources and plant stalk conservation.

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