

Traditional artifacts from dried leaves of *Cymbidium species* (orchidaceae) in Indian state of Sikkim

DR Singh⁺, RK Pamarthi, Raj Kumar, D Rai, AL Meitei & P Kiran Babu
ICAR-National Research Centre for Orchids, Pakyong, Sikkim 737 106, India
E-mail: ⁺drsinghhort66@gmail.com

Received 28 August 2018; revised 12 February 2019

Sikkim is one of the most beautiful tourist hill states with tremendous biodiversity wealth. *Cymbidium* orchid dominates the states for hobby gardeners and commercial cultivating farmers. Handicraft is a part of hobbies and livelihood of the indigenous communities of the region. The Lepcha tribe craftsmen based on dried leaves of *Cymbidium* orchid is becoming promising apart from their handloom, cane and bamboo products. Attractive, simple products of dried *Cymbidium* leaves such as fruit and vegetable baskets, containers, sitting mats, hanging pots, trash bins, and plant growing pots is gaining popularity. Due to no noticeable researches and development in this sector, the traditional artifact craftsmen are unable to establish as a source of livelihood. With strategic approaches and intervention, these unique traditional craftsmen would be a reliable economic venture for the rural youth.

Keywords: Artifacts, *Cymbidium*, Leaves, *Lepcha*, Sikkim

IPC Code: Int. Cl.¹⁹: A61K 36/00, A01N 37/30, A01H 5/12, A61K 31/357

Orchid attained man's immense attraction and curiosity because of their prettiness, elegant look, vibrant colours, long shelf-life, rare and mystic habitats. *Orchidaceae* ranks second among all the family within the angiosperm which comprises of about 22,500 species grouped under 779 genera¹. Orchids having, diverse colours and attracting characteristics, been used in many occasion of religion, cultural events, ceremonies, modern house indoor decorations, medicinal and cosmetic industry.

Cymbidiums are native to tropical and subtropical Asia. The flowers are traditionally used for worship and adornment during religious and social celebrations. Above all orchids *Cymbidium* dominates the world floriculture markets. They are also one of the costliest flowers sold in the market winning an important height amongst the commercial crop in north-eastern hilly states of India². In particular, Sikkim is the largest producer of *Cymbidium* orchids among all Indian states.

Artifacts are the products of man's imagination and workmanship of pre-historic origin³. The artifacts are products of raw materials which are available in his surroundings as a source from plant, animal and other

non-living objects. The artisans living in the existing traditional societies are normally influenced by the elements of their environment as well as by their myths, legends, rituals, ceremonies, festivals, social organizations and cultural norms which are reflecting in their creations. As a result, each culturally definable region has developed distinctive characteristics of its own in the field of creative art and craft glorifying the heritage of that locality⁴⁻⁶.

Lepcha is an indigenous dominant tribe and they are aboriginal inhabitants with an approximate population of 0.05 million in the foot hills of Sikkim Himalaya. In 2005 government of Sikkim granted the status of primitive tribe to this community⁷. Sikkim was closed to the outside world for centuries. The *Lepcha* tribe with no contact with the outside world remained in primitive stage for centuries^{2,8}. They basically worship nature or animist, and they prefer living in their own tranquil surrounding fully in tune and harmony with nature. Lepcha handloom, cane and bamboo product are famous for their artistic designs⁹. *Lepcha* tribe of Sikkim has rich knowledge about the use of plants. The rising technology and cultural expansion in rural areas is leading this cultural practice a diminishing heritage. It will only be appreciable to document this information before it is too late.

*Corresponding author

Hence, the study was undertaken to extensively survey some hill pockets of Sikkim where the people are engaged in making plant based crafts traditionally focusing on its origin, evolution, present status and future prospects not studied and reported earlier.

Methodology

Study area

Sikkim is a small and one of the most beautiful states of India well known for its scenic beauty, immensely rich biological diversity manifested by wide ranges of eco-climatic conditions. It occupies an area of 7,096 km² lying between 27° 05' to 28° 07' N latitudes and 87° 59' to 88° 56' E longitudes, about 300 m to 8500 masl and bounded by Nepal in West, Bhutan in the East, Tibet in the North and West Bengal in the South (Fig. 1). Three major ethnic communities *i.e.* Lepcha, Bhutia and Nepalese are the inhabitants of Sikkim. The main ecosystems of Sikkim can be classified as forests, grasslands and croplands or agricultural lands. The agricultural lands can be placed in to *Dhan kheti* (Rice field), *Sukha kheti* (Dry land), *Elaichi bari* (Cardamom field), *Kotha bari* (Kitchen garden), *Khasmahal* (Forest based production land) and *Gorucharan* (pastures) categories.

Identification of various sources for information was identified for collection of data, preceded by field survey to assess the current status of this important

plant based crafts as well as the condition of the artisans involved in this craft making. Data were collected through a structured interview through a formulated questionnaire where in questionnaires with several elders (30 respondents including artisans) of Lepcha tribe in the Dzongu region of Sikkim state. Field observation, meeting and personal interaction with artisans for collection of other relevant information was carried out in the hilly regions of Sikkim.

Results & Discussion

The result of the investigation reveals that making artifacts from *Cymbidium* dried leaves is exclusively the hand work of ancient folk belonging to Lepcha community. The interactions with several elders of the tribe discovered that the Lepcha people prepared artifacts from dried leaves of *Cymbidium* species *viz.* *Cymbidium eburneum* Lindl., *Cymbidium elegans* Lindl., *Cymbidium erythraeum* Lindl., *Cymbidium x gammieanum* King & Pantl., *Cymbidium hookerianum* Rchb.f., *Cymbidium iridioides* D.Don and also from *Cymbidium* hybrids having slender leaves. They collect the raw material of *Cymbidium* dried leaves from their orchards, backyards of their houses and make few traditional artifacts used in both for traditional and religious rituals as well as modern life style accessories. These artifacts have a unique intricate style, design and long life for which it is being appreciated by people since ancient times.

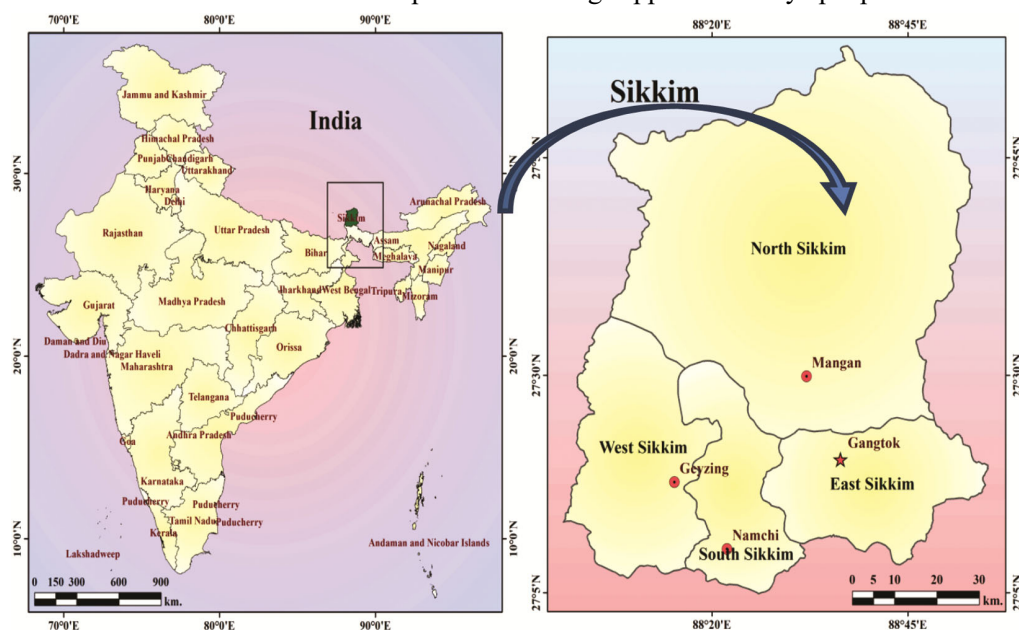


Fig. 1 — The study area - Geographical location of Sikkim

Even it became the tradition to use specific *Cymbidium* artifacts in particular socio-religious rituals performed in the locality which has indirectly helped this craft to survive as well as the traditional knowledge concerning making those items. Various attractive eco-friendly products are being made out of *Cymbidium* dried leaves, such as *Lepcha/Gurkha* hats, fruit and vegetable baskets, tea trays, containers, sitting mats, hanging pots, trash bins, and plant growing pots, *etc.* (Fig. 2). Some premeditated measures are recommended to save this endangered craft from stupor.

In Sikkim, people are fascinated about flowers, growing them in and around their houses. Floriculture changes the concept of horticulture, helping it to transform from hobby gardening towards economic

venture. The tangible impacts of Orchids, especially *Cymbidium* cultivation is sentimental, paying economic value to farmers by transforming hobby floriculture into commercial journey increasing usage of flowers for different local functions, development of floriculture clusters in many corners of the state, increased and sustained supplying of flowers to various domestic markets contributing a greater degree of floricultural entrepreneurship amongst educated youth. Sikkim is one of the favorite tourist destinations in India. The traditional artifacts are very popular among the tourist. Apart from the improvement made in this particular crafting sector, perceptible changes have not been recorded. Research and design development unit need to establish in each district of the state for generating sustainable



Fig. 2 — Different products of dried *Cymbidium* orchid leaves [a - baskets & sitting mat; b - display of baskets & sitting mat in exhibition; c - *Lepcha/Gorkha* Hat; d - fruit display in basket; e - hanging pot/basket/trash bin; f - flower pot]

livelihood both in urban and rural areas. The relevance of orchid's cultivation in the rural economy has multiplied over the years.

It is noteworthy that the traditional use of *Cymbidium* dried leaves is an integral part of the *Lepcha* tribe and hence it cannot be studied or judged in isolation. Even horticulturists/handicraft men working in the field need to take note of this and to a very large extent rely on traditional knowledge to reach a scientific conclusion. Further, detailed explorations, surveys and collection of artifact information, making process and documentation *etc.* will provide reliable source of this *Cymbidium* leaves waste management to the *Lepcha* people making the socio-cultural artifact and handicrafts a dependable income fetching means for conserving this traditional handicraft. Such comprehensive and exclusive study on traditional handicrafts has been reported by several workers from different parts of India¹⁰⁻¹⁴.

The significance of these traditional handicraft technologies and commercial potential/growing of orchids in improving the younger generations through promotion, generating employment and providing financial security to people has increased many fold and the realization of the same by cross section of the people has further increased its importance in this hilly region. The influence of the tourist attraction, curiosity and demand about these artifacts reflects on income earning on rural craftsmen. The awareness on trade related aspects on intellectual property rights (IPR) is also one important aspect for this traditional knowledge, skill and practice of creating such attractive craft items with intricate design and novelty which is now vulnerable to international piracy, illicit exploitation and monopolistic ownership and control by provision of granting its patents to some influential businessmen or corporate bodies due to lack in awareness about the laws and regulations governing the modern trade and commerce to protect their design and technology. These *Lepcha* artisans must be protected from innocent infringement of particular design or technology of *Cymbidium* craft by recognizing/patenting to prevent their possible forfeiture in imminent.

All such adverse wholesome factors are forcing the artisans to look for some alternate sources of income, leaving this age old practice permanently. So, providing advance training and demonstration of technology to artisans, financial assistance to develop their infrastructure as well as proper marketing of their products can save this unique plant based craft from

oblivion. Considering the long time effect of polythene bags to the environment, it is desirable to continue and promote use of *Cymbidium* leaf baskets for keeping the vegetables and fruits for freshness and the basket pots for cultivation of ornamental plants. These eco-friendly basket pots are absorbing the water which maintains the moisture levels for a longer period.

Conclusions

The present study focuses on the rich traditional knowledge and workmanship of indigenous *Lepcha* community artisans, of the Dzongu region, in making their unique dried *Cymbidium* leaf based artifacts using leaves of native *Cymbidium* species. Orchid cultivation plays an important role in the livelihood of all the communities in the hilly rural pockets of Sikkim. There are ample scopes and possibility of making these artifacts a livelihood based resources to improve the income of the rural poor by enhancing awareness through skill development schemes.

Acknowledgements

This project was funded by the GB Pant National Institute of Himalayan Environment and Sustainable Development, Kosi-Katarmal, Almora, Uttarakhand and we thank for supporting the ongoing project on "National Mission on Himalayan Studies (NMHS) Himalayan Research Fellowship (GBPI/NMHS/MF/RA/2015-16, dt:30-03-2016).

References

- 1 Mabblerley, D J, *Mabblerley's Plant-book: A portable dictionary of plants, their classification and uses*, Third edition, Revised, Cambridge University Press, Cambridge, XVIII, (2008)1021pp.
- 2 Khan A M, Rampal & Singh D R, *Unique uses of single Cymbidium flowers*. Tech Bull. No.51, National Research Centre for Orchids, Pakyong, Sikkim (Astral Publishers, New Delhi) 2016.
- 3 Tripathy B K, Panda T & Mohanty R B, Traditional artifacts from Bena grass [*Chrysopogon zizanioides* (L.) Roberty] (*Poaceae*) in Jaipur district of Odisha, India, *Indian J Traditional Knowledge*, 13(4) (2014) 771-777.
- 4 Chatravathy R, Dutta P & Ghose J, Sericulture and traditional craft of silk weaving in Assam, *Indian J Traditional Knowledge*, 9(2) (2010) 378-447.
- 5 Dogan Y, Nedelcheva A M, Pathovic D O & Padure I M, Plant used in traditional handicrafts in several Balkan countries, *Indian J Traditional Knowledge*, 7(1)(2008):157-161.
- 6 Lepcha S R, Gurung R, & Arrawatia M L, Traditional *Lepcha* craft *Sumok-thyaktuk* (*Lepcha* Hat) and its conservation in Dzongu Tribal Reserved Area (DTRA), Sikkim, India, *Indian J Traditional Knowledge*, 11(3) (2012) 537-541.

- 7 Morris J, *Living with Lepchas: A book about the Sikkim Himalayas*, (London, William Heinemann Ltd) 1938.
- 8 Thakur R N, *Himalyan Lepchas*, (Archives Publication, New Delhi) 1988.
- 9 Sharma T P & Borthakur S K, Traditional handloom and handicrafts of Sikkim, *Indian J Traditional Knowledge*, 9(2) (2012) 375-377.
- 10 Anjali Karolia & Surabi Sirdiwal, Namda – The traditional felted craft of Rajasthan, *Indian J Traditional Knowledge*, 13(2) (2014) 409-415.
- 11 Jain R & Tiwari A, An insight in to the traditional Bandhej craft of Sikar city of Rajasthan, *Indian J Traditional Knowledge*, 11(4) (2012) 733-737.
- 12 John S S, Traditional knowledge of folk crafts in Tamil Nadu, *Indian J Traditional Knowledge*, 9 (3) (2010) 443-447.
- 13 Patel N B, Sidanna B S & Jain B K, Tribal artifacts of Dholwani forest of Sabarkantha (Gujarat), *Ethnobotany*, 15 (2003) 40-43.
- 14 Radhakrishnan K, Pandurangan A G & Pushpan P, Tribal artifacts of Kerala, *Ethnobotany*, 12 (2000) 67-71.