

Consumable Bamboo Shoot Species and their Traditional Ways of Consumption in the Foothills of Dimapur District of Nagaland

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Abstract

Since time immemorial, juvenile tender bamboo shoots are being used for consumption in a variety of ways in the Northeastern states of India. The state of Nagaland, which is also a part of Indo-Burma (Myanmar) center of origin of several crops, is rich in bamboo genetic diversity. Diversity in consumable bamboo shoot species is frequently encountered in the state. On the other hand, the discovery of two entirely new bamboo species Bambusa nagalandeana and B. alemtemshii also reflects the rich biological diversity with respect to bamboos in the state. The present survey based investigation was carried out in the foothills of Dimapur district of Nagaland in order to gather information on species level diversity of consumable bamboo shoots together with the traditional consumption methods in the area. It was recorded that in the foothill areas of Dimapur district mostly Dendrocalamus hamiltonii, D. giganteus, D. hookerii, D. sikkimensis, and Melocanna baccifera are utilized for consumption. Moreover to a lesser extent, B. balcooa and B. tulda were also used by the local consumers. Information on traditional consumption methods together with processing, fermentation, and storage of the food products was studied with particular reference to four major Naga tribes of the area – Ao, Sema, Lotha, and Angami. Different types of fermentation methods recorded in the study reflected the rich knowledge base of the tribes in safe fermentation of food products. Moreover, different successful storage methods were used by the traditional consumers for off-season consumption.

Bamboo shoots are important sources of a number of dietary nutrients like free amino acids, proteins, carbohydrate, vitamin C, phenolic acids, and phytosterols and also a rich source of dietary fibers. In contrast to all these positive qualities, scientific evidence on presence of a few anti-thyroid compounds in young bamboo shoots has been reported. Research to modify the bad effect of these anti-thyroid compounds is the need of the hour, as bamboo shoots are otherwise good sources of important nutrients.