2016

iMedPub Journals http://www.imedpub.com

Journal of Medical Toxicology and Clinical Forensic Medicine ISSN 2471-9641

Vol. 2 No. 1:2

DOI: 10.21767/2471-8505.100014

Depleting Minor Forest Fruit Sathyanarayana Bhat Ximenia americana L

Govt. Ayurveda Medical College, Mysuru,

Abstract

Nagareya pan is the colloquial name given to Ximenia americana, a minor fruit. The first mention is found in Kannada, Toxicological text of 1347 AD. It is the first text which attributes medicinal use to this plant. Many Ethno medicinal uses are revealed at households. Such data are documented by the author during the field work. The populations of Ximenia americana L (OLACACEAE) are gradually depleting in the forests due to monoculture, lack of seed dispersal by feedant birds and animals and habitat fragmentation.

Keywords: Toxicology; Khagendra mani darpana (KMD); Antidote; Ethnomedicine

Received: December 24, 2016; Accepted: February 13, 2016; Published: February 20, 2016

Corresponding author: Sathyanarayana Bhat

sathyanarayana.bhat@gmail.com

MD, PhD, Ex- Principal, Govt. Ayurveda Medical College, Mysuru, India

Tel: 91-09448081005

Citation: Bhat S. Depleting Minor Forest Fruit Ximenia americana L. J Med toxicol clin forensic med. 2016, 2:1.

Khagendra Mani Darpana [1] is an unique complete text on Ancient Indian Toxicology compiled by a dominion king Mangarasa during 1347 AD. He lived at Mugulipura (Mugulavalli) near the present Chikkamagaloor, a district headquarters in Karnataka South India. Focal theme of the text is description, prevention management of all types of the poisons caused by animal, plant and mineral origin. KMD text referred names of over 116 plants among which X. americana L is also prominent. The fruits are processed with snake moult and cat faeces. The fumigation of this material was used to drive away rats from the households (KMD12.23). Seed of the fruit and the rat faeces are ground together and used for fumigation to drive away rats (KMD16.84). However such practices are not in vogue. But the fruit is known as edible one. Still oral traditions of Ethno medicine prevail in parts of Karnataka support the uses of X. americana L as an antidote to poisons.

Incidentally the wild populations of X. americana are becoming rare. Small shrubs of this plant were cited at Namachilume ranges at Tumukur district in Karnataka. Recent survey jointly conducted by Karnataka Medicinal Plant Authority (KaMPA) and Karnataka Biodiversity Board helped the author to locate a four meters tall, healthy tree at BannerGhatta reserve forest area, (Bengaluru rural Dist) and BelliBetta kavalu near KR Pet town (Mandya dt). The second location is highly fragmented because of Eucalyptus plantation, where the native diversity is almost extinct. Only one bush of one meter height of X. americana was cited during the survey.

Navaloor is a hamlet village located in between Hubli-Dharwad twin cities of central Karnataka. In this village 20 years ago, a shepherd explained the features of this edible fruit. He, Mr. Duggappa Iti, also told the seeds and root of X. americana was extensively used for the treatment of poisonous bites. This oral communication further supports the reference of KMD text. Smt Usha Sathyanarayana, another informant orally communicated the traditional healing properties of Nagare (X. americana) root. She originally belongs to Kikkeri(small village near KR Pete, Mandya dist) but presently stays at Bengaluru city. She lamented that the bushes of *X. americana L* was very common in the bunds and fields of cultivated lands, 35 years ago. But, it is not at all seen and become very rare, she said. The root of X.americana L was kept at every household. It was a first aid remedy to manage bites and cases of poison. She further added that the plant root was not only the best antidote for poison, but it was best drug to prevent abortive tendency among pregnant women as well as in

Conclusion: The multiplication of X. americana L through seeds and cuttings may be undertaken. Mass cultivation is suggested to popularize and market this less known fruit is the need of the hour. It definitely provides food to birds and other animals at wild. It is very potential minor fruit with nutritive values which contains anthroquinones, starch, glycosides, flavonoids and tannin. The studies to support the anti-poisonous effects can also be undertaken. Studies to evaluate Estrogenic and gonadotropic activities is also suggested.

Acknowledgement

Regional Resource Centre, MGM college, Udupi, KaMPA and Karnataka Biodiversity Board

Vol. 2 No. 1:2

References

1 Bhat S, Udupa K (2013) Taxonomical outlines of bio-diversity of Karnataka in a 14th century Kannada toxicology text Khagendra Mani Darpana. Asian Pac J Trop Biomed 3: 668-672.