

REPORT ON *XYLOCARPUS GRANATUM* KOEN NEAR SANDY SHORE OF VISAKHAPATNAM COAST, ANDHRA PRADESH

P. PRAYAGA MURTY and M.VENKAIAH

Department of Botany, Andhra University, Visakhapatnam-530 003, Andhra Pradesh, India.

Email: ppm_phd@yahoo.co.in, pragada007@gmail.com

Mangroves are unique ecosystems and occupying large tracts along sheltered coasts estuaries and deltas where they are influenced by tides and widely differing conditions of salinity and rainfall. Contrary to the above statement mangrove species *Xylocarpus granatum* Koen along with few associated mangrove species are present near the sandy shore of Visakhapatnam coast.

Keywords : Mangroves; Sandy shore; *Xylocarpus granatum*.

While exploring the weeds of the coastal regions of Andhra Pradesh, we encountered an interesting associated mangrove species at Lawson's Bay beach, Visakhapatnam, where the Hanumanthawaka hill stream merged the sea. Mangroves are tropical formations which grow in swampy estuarine regions only. Contrary to the above statement mangrove species *Xylocarpus granatum* Koen. along with few associated mangrove species is reported. A sewage canal from local city habitations join with Hanumanthawaka stream near these associated mangrove populations and then merging with sea water. But, During high tides of sea, seawater enter into this canal which follows the formation of swampy region with water salinity of 20 to 22 ppt with turbid water *Xylocarpus granatum* and other associated species growing along the one side of the creek.

Description of the plant - An evergreen tall tree up to 18 m tall, spreading area 6m, girth of the stem 2.5m, branchlets sparsely lepidote; leaves alternate abruptly pinnate, coriaceous 7.5-10.0 cm long, leaflets 1-2 pairs, 7.5-10 x 3.5-4.5 cm, oblong-obovate or elliptic, some time solitary, opposite, obovate, puberulous, glossy above, base narrowed, sub equilateral, apex obtuse or shortly acuminate margin entire, petiole 6cm long; flowers in axillary few flowered cymes, white in colour, disc capsular thick; staminal tube urceolate, glabrous, 8-lobed, lobes 2 partite, anthers included within; plant yield only 8-10 fruits per season, fruit loculicidal capsule, capsule 20-30 cm diam., irregularly subglobose, 4-celled; seeds 4-6, large, thick, angular, pyramidal, convex on the back (Fig.1).

Other species reported in this study area are:

Pandanus fascicularis Lam; *Clerodendrum inerme* (L.) Gaertn; *Caesalpinia bunduc* L.; *Hibiscus tiliaceus* L.;

Derris trifoliata Lour.

Mangrove populations are distributed along east coast and west coast of India and Andamans. Several authors studied the distributions of mangroves in Andhra Pradesh¹⁻⁴. The above authors studied Godavari, Krishna, Sarada and Varaha estuarine complexes they did not mention the *Xylocarpus granatum*. Sudhakar⁵ reported the *Xylocarpus granatum* in Godavari estuary and Pullaiah⁶ at Nizampatnam. The present report on *Xylocarpus granatum* is similar to the observations and findings of Sudhakar⁵ at Godavari estuary and Pullaiah⁶ at Nizampatnam. But, climatic hydrographical parameters are dissimilar when comparing with other habitations such as Godavari and Nizampatnam regions. It may be first report of the *Xylocarpus* growing luxuriantly in shore habitat without any estuary.

Urbanization and other development activities have resulted in restricted spread of the species. Its distribution is restricted to a small area near sandy shore of Visakhapatnam coast. As its distribution is in a limited area it is recommended as a rare species of botanical interest. We plead the Forest Department, Government of Andhra Pradesh, for its protection under *in-situ* as well as *ex-situ* conservation programme. Necessary steps to multiply the population of the species are required.

Acknowledgement

Authors are grateful to Dr.G.M.Narasimha Rao, Asst. Professor, Department of Botany, Andhra University, Visakhapatnam for his help with constructive suggestions.

References

1. Umamaheswara Rao M and Narasimha Rao G M 1988, Mangrove populations of the Godavari delta complex. *Indian J. Mar. Sci.* 17 326-329.



Fig.1. *Xylocarpus granatum* Koen 1. Whole plant, 2. Leaves, 3. Flowers, 4. Bark, 5. Fruit, 6. Seeds.

2. Venkanna P and Rao G M N 1993, Distribution pattern of the mangroves in the Krishna estuary. *Indian J. For.* **16** 48-53.
3. Narasimha Rao G M and Venkanna P 1996, Macroalgae of the Sarada and Varaha Esturine complex. *Indian. J. For.* **19**(2) 203-204.
4. Venkaiah M and Prayaga Murty P 2007, A Rare Mangrove "*Sonneratia caseolaris*" in Coringa Mangrove Forest area, East Godavari, Andhra Pradesh. *Proc. And. Akad. Sci.* **11**(3) 188-190.
5. Sudhakar S, Rao R S and Venkanna P 1999, *Flora of East Godavari district, Andhra Pradesh*, INTACH, Hyderabad.
6. Pullaiah T 1997, *Flora of Andhra Pradesh* 1 192 Scientific Publishers, Jodhpur.