Agrospheres:e-Newsletter, (2020) 1(2), 17-19



Article ID: 123

Tecomella undulata (Rohira): A Valuable Endangered Tree of Indian Thar Desert

Satish Kumar*

Department of Botany, CMG Govt. College for Women, Bhodia Khera, Fatehabad, Haryana



Corresponding Author Satish Kumar

E-mail:

drsatishverma1008@gmail.com

Article History

Received: 20 June 2020 Revised: 29 June 2020 Accepted: 4 July 2020

INTRODUCTION

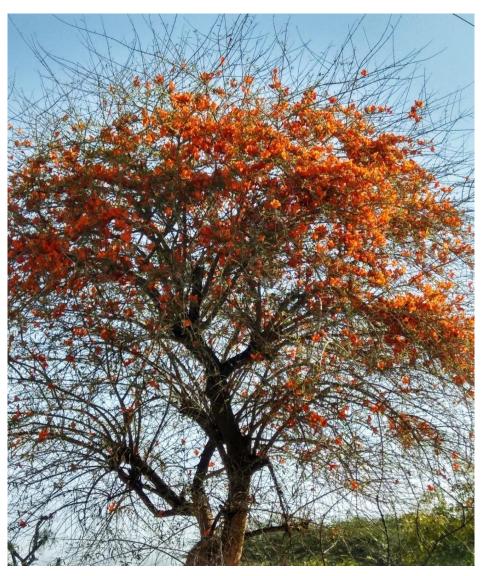
Tecomella undulata (Smith) Seemann vern. Rohira, Desert Teak, Marwar Teak, Rugtrora, Rohido, Raktarohida, Lahura, Roira and Rohi is a monotypic genera of family Bignoniaceae. It is distributed in small patches in arid and semi-arid regions of India, Pakistan, Sind and Baluchistan along with Prosopis cineraria, Zizyphus numularia, Salvadora oleoides, decidua and Capparis other xerophyptes. It is small ornamental tree with a height of 4 to 8 m, curved trunk, drooped branches and yellow to orange showy flowers. Flowers are at full bloom in February and March months every year which later on produce 15-20 cm long brownish grey pods having light weight, brownish and winged seeds. Seeds are dispersed by wind currents and have poor germination capacity in harsh conditions of desert. Plant mainly regenerates from seeds but root suckers also capable to regenerate into new plants during rainy season. This species is mainly attacked by insect-pests like Stegmatophora and Patiallus tecomella. Its population has decreased to alarming level due to its continuous exploitation for timber, fodder & food; its poor germination and regeneration capacity and severe attack by pests. Now Rohira has been placed in the list of endangered species by most of the researchers.

Cite this article: Satish Kumar, S. (2020). *Tecomella undulata* (Rohira): A Valuable Endangered Tree of Indian Thar Desert, *Agrospheres:e-Newsletter. 1*(2), 17-19.

Importance of Rohira

Tecomella undulata is well known for its socio-economic and medicinal importance among people of arid areas. Though, it is slow growing, but capable to stabilize the shifting of sand dunes and check the erosion of sandy soil. Its wood is close grained, polishable and have high tensile strength which is used to make persian wheels, toys, furniture, doors and agricultural implements. Wood is also a good source of charcoal and firewood to people. Its heartwood has a quinoid, Lepachol which has anti-fungal and anti-termite properties. Bark of Rohira is locally used to cure gonorrhoea, urinary infection, spleen problems, leucoderma, syphilis and liver diseases. Bark extract is found effective

against thioacetamide caused hepatic toxicity and also has anti-oxidant characters. Tribal communities take steam of crushed leaves to cure cough and apply paste of bark on eczema. It is reported that in Khuzdar and Kalat areas of Pakistan, its flowers are used by women in tea to overcome sterility. Tree is found very effective to cure scabies caused by Sarcoptes scabiei due to presence of bio-miticidal chemicals like Lapachol, Flavonoids etc. Many researchers have reported that Rohira tree has anti-cancer, anti-bacterial, anti-HIV and anti-diabetic properties also. Its leaves, flowers and pods are relished as a good fodder by camel, sheep and goats in adverse xeric conditions of desert.



Rohira with full bloomed orange red flowers

CONCLUSION

Tecomella undutala is an agroforestry and ornamental tree of arid and semi-arid region which grows in small pockets on elevated sand dunes. It is well adapted to harsh environmental conditions of Thar Desert in India and plays an important role in man-treecattle trophic interaction for ecological balance in desert ecosystem. Rohira is mainly used by local people and Ayurvedic professionals to cure many ailments. Tree has a vast range of pharmacologically important compounds which are being used to manufacture biologically important medicines. population have severely declined due to illegal cutting, slow growth and poor germination factors and it is listed as endangered species in Red Data Book. Hence, there is a great need to conserve this valuable tree by adopting its rapid multiplication methods like tissue culture biotechnological processes. In short, Rohira has many ethno-botanical, ecological and pharmacological importance to human being and it should be conserved by scientific efforts through in-situ and ex-situ measures.

REFRENCES

- Arya, S., Kumar, S., Kumar, N., Toky, O.P., & Harris, P.J.C. (1997). Provenance variation in seed germination and growth of six month old seedlings of *Tecomella undulata* (Smith) Seemann. *Journal of Tree Sciences*, *16*(2), 92-95.
- Arya, S., Toky, O.P., Harris, S.M., & Harris, P.J.C. (1992). *Tecomella undulata* (Rohira): A valuable tree of the Thar desert. *International Tree Crops Journal*, 7, 141-147.
- Dhir, R., & Shekhawat, G. S. (2012). Critical review on *Tecomella undulata*: a medicinally potent endangered plant species of Indian Thart Desert. *International Journal of Current Research* 4(6), 36-44.
- Saggoo, M. I. S., Kaur, N., & Gill, A. (2015). Economically valuable *Tecomella* undutala an endangered tree of Arid Zone. 'Insight'- an International Journal of Science, 2, 8-13.
- Vyas, S., Pandya, D., Rajhans, S., & Mankad, A. (2019). A review on *Tecomella undutala* as an endangered plant. *International Journal of Scientific Research and Review*, 8(5), 328-337.