IJARSCT



International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

Volume 3, Issue 1, January 2023

Quality Aspects of Eucalyptus

Mr. Piyush D Pokharkar¹, Miss. Rachana Kamble², Mr. Tushar Ghongde³, Mr. Tanmay Shinde⁴
Samarth Institute of Pharmacy, Belhe, Pune, Maharashtra, India^{1,2,3}
Assistant Professor, Samarth Institute of Pharmacy, Belhe, Pune, Maharashtra, India⁴

Abstract: Eucalyptus is fastest growing species popularly known as gum tree, red iron tree, safeda and belonging to the family Myrtaceae. E. tereticornis and E. grandis are important commercial species with a clean straight bole and compact crown. Large scale plantations have been raised on forest and farm lands, community lands, field boundaries and road/rail/canal strips in India. It is most suitable species for degraded land, waterlogged areas, problematic soils etc. Although, it is a controversial tree because of high water consumption, nutrient depletion, allopathic effects etc., it is also source of pulp, paper, essential oil, timber, medicinal use, etc. Moreover it also provides ecological, socioeconomic and industrial services. Improvement in physical and chemical properties of on Sodic wastelands, heavy metal accumulation in different tissues of in mined soil; carbon sequestration potential, etc. were reported in studies. On unit basis of dry biomass produced, it consumes very little water compared to other trees. If bark of the tree is left on site, the balance of nutrients remaining is (80-88%) of inputs for N, P, K, Ca and Mg which lasts for several years without considering the original nutrients that are still present in soil. In the face of growing economy and increased demand for wood products, it remains to be the desired species that grows fast and produce wood to meet the demand of wood for fuel, construction and furniture materials. Relieving wood product scarcity, landscape re-greening, contribution to poverty reduction, biodiversity restoration and conservation are valuable contribution in forest sector.

Keywords: Eucalyptus Oil, Quality Aspects, Physicochemical Properties, Formulation, Evaluation

REFERENCES

- [1]. P. G. Wilson, M. M. O' Brien, P. A. Gadek, C.J. Quinn. (2001). Myrtaceae revisited: a reassessment of infrafamilial groups. American Journal of Botany. 88(11): 2013-2025.
- [2]. M. Gooding, R. Ellis, P. Shewry, J. Schofield. (2003). Effects of restricted water availability and increased temperature on the grain filling, drying and quality of winter wheat. Journal of Cereal Science. 37(3): 295-309.
- [3]. D. Boland, M. Brooker, J. Turnbull, D. Kleinig, Eucalyptus seed. Division of Forest Research. In CSIRO, Canberra, Australia: 1980.
- [4]. C. Orwa, A. Mutua, R. Kindt, R. Jamnadass, A. Simons. (2009). Agroforestree database: a tree species reference and selection guide version 4.0. World Agroforestry Centre ICRAF, Nairobi, KE.
- [5]. Y.-z. Chen, F.-l. Li. (2005). Micropropagation and callus culture of Saussurealaniceps, an alpine medicinal plant. Forestry Studies in China. 7(1): 16-19.
- [6]. D. Opdyke. (1975). Food and cosmetics toxicology. Monographs of Fragrance Raw Materials. 13: 875.
- [7]. L. Mbuya, H. Msanga, C. Ruffo, A. Birnie, B. Tengnas. (1994). Useful trees and shrubs for Tanzania. SIDA (Swedish Intern. Develop. Auth.), Nairobi, Kenya, 542p.
- [8]. S.J. Midgley, J.W. Turnbull, K. Pinyopusarerk. (2003). Industrial Acacias in Asia: Small brother or big competitor. Eucalyptus plantations—research, management and development. 19-36.
- [9]. N. Kaikini In Eucalyptus in Mysore state, Proceedings of the tenth all India silvicultural conference, Dehra Dun, 1961; 1961; pp 546-553.
- [10]. T. Chingaipe. (1985). Early growth of Eucalyptus camaldulensis under agroforestry conditions at Mafiga, Morogoro, Tanzania. Forest Ecology and Management. 11(4): 241-244.

DOI: 10.48175/568

[11]. G. Iglesias-Trabado. (2007). Eucalyptus: The Giants of Spain & Portugal.

IJARSCT



International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

Volume 3, Issue 1, January 2023

[12]. T. Paine, C. Hanlon. (2010). Integration of tactics for management of Eucalyptus herbivores: influence of moisture and nitrogen fertilization on red gum lerp psyllid colonization. Entomologia experimentalis et applicata. 137(3): 290-295.quality.

DOI: 10.48175/568