

JOURNAL OF BIODIVERSITY AND CONSERVATION

Shaccharum spontaneum (Kasa Tandi): a medico -socio-economic grass of Odisha

Subhadarshini Satapathy^{1*} & Sanjeet Kumar²

¹Department of Botany, School of Applied Sciences, Centurion University of Technology
and Management, Odisha, India

²Ambika Prasad Research Foundation, Odisha, India

*Email-Id:subhadarshini.satapathy@gmail.com

ARTICLE INFO

Article History

Received: 11 September 2019

Keywords: Wetland, economic values, medicinal values

Received in revised form: 12 October 2019

Accepted: 20 November 2019

Abstract

Odisha is a land of 62 group of tribal and they rely on plant sources for their health care. *Saccharum spontaneum* L. is a perennial grass belongs to family Poaceae. It is commonly known as wild sugar cane. It occurs throughout India along with river side and Tropics of old world. It is considered as valuable medicinal herb in traditional system of medicine in India. It acts as folk medicine. This study was carried out in Odisha. The result reveals that the plant parts are used to cure abdominal disorder, diuretic, dysentery etc.

INTRODUCTION

Indian Systems of Medicine derives many of their tools from plant (Kumar et al. 2005). Uses of plant as drug often found in old literature like Sushruta Samhita, Charaka Samhita, Atharveda etc. After the development of Allopathic drug, people still rely on traditional medicine because of its cheaper cost and no side effect (Kokate et al. 2002). Some grasses also have medicinal values. Grasses mainly describe the monocotyledons. They belong

to family 'Poaceae' and known as 'True grasses' (Dashora & Gosavi 2013). These are about 10,000 classified into 600 to 700 genera (Cloyton & Renvoize 1986). Grasses form an important part of Urban and Suburban landscapes. Members of this family are ecologically dominant covering approximately 20 % of earth's land surface (Shantz 1954). *Saccharum spontaneum* L. (Figure 1) is a perennial tall grass found naturally in pastoral lands in many Tropical countries (Pandey et al. 2014). It

is called as 'Kashatandi'. It is erect reed like grass with plum like inflorescence, grows in marshes up to 3 meter in height. Leaves are harsh and linear 0.5 to 1 meter long and 6 to 15 meter wide. Branches are slender and whorled branches joint

covered with white hair (Saxena and Brahmam 1995). This grass is used as medicine in the India System of Medicine. The present study was carried out in Odisha which highlights the important uses of *Saccharum spontaneum*.

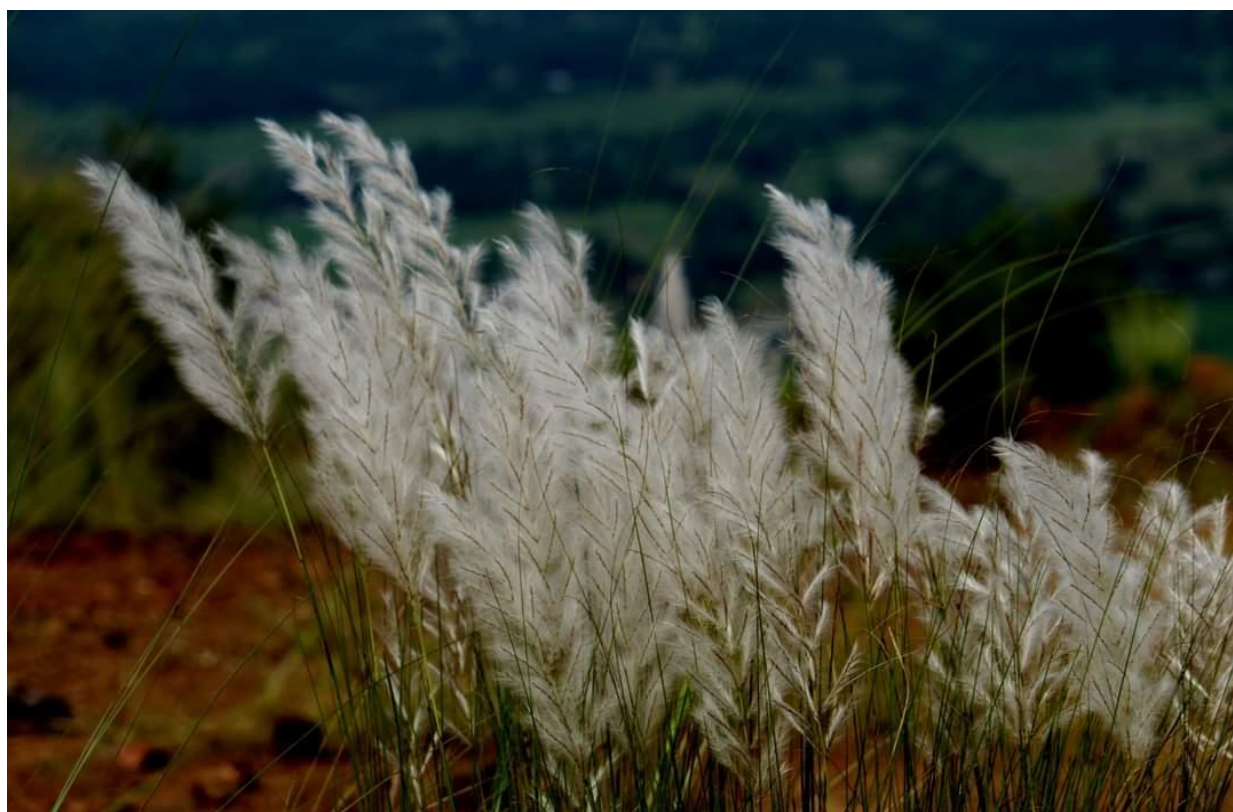


Figure 1: *Saccharum spontaneum* L.

MATERIALS AND METHODS

Odisha is situated in the East coast of the Bay of Bengal of Indian sub-continent and lies in between 17° 48' - 22° 94'N latitude and 81° 24' - 87° 29'E longitude. It is a treasure house of healing herb, which are used in Indian System of Medicine like Ayurveda, Unani etc. (Behera et al. 2008). The main aim of the study is to know the medicinal uses of *Saccharum spontaneum*. The plant was identified following 'The Flora of Odisha' (Saxena and Brahmam 1995) and discussing with local people the medicinal uses were noted.

RESULTS AND DISCUSSION

According to Ayurveda, *Saccharum spontaneum* L. is one of the important medicinal plant in traditional system of medicine in India. It is given with cow milk and sugar for a month to cure Leucorrhoea (Tomar 2009). Roots are used to treat dyspepsia, burning sensation, piles, sexual weakness, respiratory troubles. Tribal people use fresh juice of its stem in the treatment of mental illness and disturbances (Kumar et al. 2010). *Saccharum spontaneum* L. is used to treat Gastro intestinal disorder (Tantiado 2012).

Whole plant is used to treat blood diseases (Hussain et al. 2008).

CONCLUSION

The above study reveals that *Saccharum spontaneum* has diverse medicinal values. It is used to cure dysentery, mental illness etc. Mainly fresh plant is used to prepare medicine. So local people should be encouraged to conserve them.

REFERENCES

- Kumar S, Praveen F, Goyal S & Chauhan A. (2005). Trading of ethnomedicinal plants in the Indian arid zone. *Indian forester*. 13(3):371-378.
- Kokat CK, Purohit AP & Gokhale SB. (2002). *Pharmacognosy* (Nirali publication Pune). 1-6.
- Tamor A. (2009). Folk medicinal uses of plant roots from Meerut district, Uttar Pradesh. *Indian Journal of Traditional Knowledge*. 8(2): 298-301.
- Dashora K & Gosavi KV. (2013). Grasses: An underestimated medicinal respiratory. *Journal of Medicinal Plant Studies*. 1(3): 151-157.
- Saxena HO & Bramham M. (1995). *The Flora of Orissa*, Orissa Forest Development Corporation Ltd & Regional Research laboratory.
- Clayton WD, Renvoize SA. (1986). *Genera Graminum*. Majesty's office. London.
- Behera BC, Behera B, Nanda BK, Sahoo RK & Meher. (2016). Ethnomedicinal plants of Gandhamardana hills (Odisha): a review. *India The Pharma Student*. 27: 01-06.
- Pandey VC, Bajpal O, Pandey DN & Singh N. (2014). *Saccharum spontaneum*: an underutilized tall grass for revegetation and restoration programmes. *Genetic Resources Crop Evolution*. DOI: 10.1007/S10722-014-0208-0.
- Tantiado RG. (2012). Survey on Ethnopharmacology of medicinal plants in Iloilo, Philippines. *International Journal of Bioscience and Bio-technology*. 4(4): 11-26.
- Kumar CAS, Varodharayan R, Muthumani P, Meera R, Devi P & Kameswari B. (2010). Psychopharmacological studies on the stem of *Saccharum spontaneum*. *International Journal of Pharma Tech Research*. 2(1): 319-321.
- Hussnain K, Shahazad A & Hussnain ZU. (2008). *Ethnobotanical leaflets*. 12: 29-35