

Wrightia tinctoria R. Br. belongs to the family Apocynaceae commonly called as Sweet Indrajao, Pala Indigo Plant, Dyer's Oleander, Jaundice curative tree in south India. The leaves of this tree yield a blue dye called pala indigo. It is a widely recognized medicinal plant and considered to be therapeutically very effective jaundice plant in India in indigenous system of medicine. Crushed fresh leaves when filled in the cavity of decayed tooth relieve toothache. In Siddha system of medicine, it is used for psoriasis and other skin diseases. Oil 777 prepared out of the fresh leaves of the plant has been assigned to analgesic and anti-inflammatory activities and to be effective in the treatment of psoriasis. It has anti-inflammatory and anti-dandruff properties and hence is used in hair oil preparations. The study showed that *Wrightia tinctoria* can be used for the development of effective therapeutic approaches towards the prevention or treatments of various immune conditions and different types of cancer.



Beena Jose



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ANTICANCER POTENTIAL OF *WRIGHTIA TINCTORIA* (Roxb.) R. Br.

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Beena Jose

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CHAPTER I

SECTION 1: PHYTOCHEMICAL STUDIES ON THE LEAVES OF

WRIGHTIA TINCTORIA R.Br.

I.1.1 Introduction

Wrightia tinctoria R. Br. belongs to family Apocynaceae commonly called as Sweet Indrajao, Pala Indigo Plant, Dyer's Oleander. "Jaundice curative tree" in south India. Sweet Indrajao is a small, deciduous tree with a light gray, scaly smooth bark. It is widely distributed in India and Burma in deciduous forests, especially in Rajasthan, Madhya Pradesh and peninsular India ascending to an altitude of 1300m. The genus of *Wrightia* is named after a Scottish physician and botanist William Wright (1740 - 1827). The leaves of this tree yield a blue dye called pala indigo. Sweet Indrajao is called dhudi (Hindi) because of its preservative nature. Supposedly, a few drops of its sap in milk prevent curdling and enhance its shelf life, without the need to refrigerate. The wood of Sweet Indrajao is extensively used for all classes of turnery. It is made into cups, plates, combs, pen holders, pencils, and bedstead legs. It is commonly used for making Chennapatna toys (Reddy et al, 1999).

Wrightia tinctoria is a widely recognized medicinal plant (Khyade et al., 2011) and considered to be therapeutically very effective jaundice plant in India in indigenous system of medicine. The juice of the tender leaves is used efficaciously in jaundice. Crushed fresh leaves when filled in the cavity of decayed tooth relieve toothache. In Siddha system of medicine, it is used for psoriasis and other skin diseases. Oil 777 prepared out of the fresh leaves of the plant has been assigned to