

## Extraction and characterization of *Butea monosperma* (Lam.) Kuntze flower petals dye for its uses in the colouration of pharmaceutical syrup

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### Abstract

Natural dyes are emerging globally as eco-friendly synthetic colourant. In present study has been made to extract the natural dye from the fresh, shade dried field dropped and sunlight dried flowers petals of *Butea monosperma* (Lam.) Kuntze (*Palash*). Good quantity of crude dye was extracted from dried flower petals of *Palash*. The flowers compounds were analysed and identified as chalcone, butein, orange yellow needles and flavanone, butein and its glycoside butrin. The crude flower petals dye after further purification and refining has tremendous scope as a medicine and can also serve as colouring material in pharmaceutical syrup, soft drinks and other food products like jam, chow mein, noodles, sausage, etc. Natural dye from the flower petals of *Palash* and its probable application in the field of pharmaceutical industry, textile and food items. Flowers petal dye has got tremendous potential as a colouring material in pharmaceutical industry and other food products.

**Keywords:** *Butea monosperma*, flower petals dye food, pharmaceutical, food.

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### 1. Introduction

*Butea monosperma* (Lam.) Kuntze plants [1, 2] belongs to the family- Papilionaceae and Fabaceae, is commonly called as *Palash*, *Dhak*, *Tesu* or *Flame of The Forest*. It is a native of India and South Asia and spread other countries like Indonesia, Nepal, Thailand, Cambodia, Japan, Laos, Vietnam and China. The natural dyes are known for their uses in the colouring of pharmaceutical medicine, food substrate, leather, wood, natural fibres like wool, silk, cotton and flax since ancient times [3, 4].

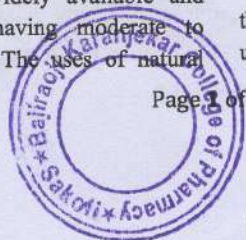
Natural dyes may have a wide range of shades and can be obtained from various plant parts like root, bark, leaves, fruit and flowers [5].

Since the advent of the widely available and cheaper synthetic dyes in 1856 having moderate to excellent colour fastness properties. The uses of natural

dyes having poor to moderate wash and light fastness has declined to a great extent. However, recently there has been revival of the growing interest on the application of natural dyes on natural fibres due to worldwide environmental problems [6].

Plant is used for timber, resin, fodder, medicine and dye; it is also a host to the lac insect which produces resin and natural lacquer. Plant is commonly found in all over India. It is a small to medium sized deciduous tree upto 5-15m tall upto 43cm diameter. Flower is bright reddish yellow in colour, blooms in huge quantity in summer season. Flowers on necked branches appear like Flame of Fire from a distance.

Each flower is 2- 4cm in diameter and petals of these flowers are great source of natural dye, which can be used as medicine and food constituent. Medicinal uses of



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