

EXTRACTION OF NATURAL DYES FROM SELECTED PLANT SOURCES AND ITS APPLICATION IN FABRICS

DIVYA LEKSHMI R. B¹ & RAVID²

¹Department of Biotechnology, Anna University, Regional Centre, Coimbatore, Tamil Nadu, India

²PG and Research, Department of Botany, Government Arts College, Coimbatore, Tamil Nadu, India

ABSTRACT

Natural dyes from plants have been given much interest in recent years due to the threat and harmful effects arising from synthetic dyes and environmental awareness created by researchers. In this study methanolic extract of seven different plants were considered i.e., *Aloe vera*, *Azadirachta indica*, *Bixa orellana*, *Curcuma longa*, *Punica granatum*, *Quercus infectoria*, and *Thymus Vulgaris* extracts were dyed to the scoured cotton fabrics. These fabrics were mordanted with Alum acetate/ acetic acid for fastening of the imparted colours. The extracts were also qualitatively analysed for the major phytochemical components present in it. All the extracts were found to have the bioactive components, Tannins, Saponins, and terpenoids. The dyed cotton fabrics were observed with different shades of colour and also its durability and colour fastening are tested.

KEYWORDS: Natural Dyes, *Aloe vera*, *Azadirachta indica*, *Bixa orellana*, *Curcuma longa*, *Punica granatum*, *Quercus infectoria*, *Thymus vulgaris*, Phytochemical Analysis