ABSTRACT
The present thesis entitled "Studies On Biologically Active Components Of Some Leguminosae Plants" deals with the isolation, purification and characterisation of the flavonoidal constituents from following three Leguminosae plants.

1. *Butea monosperma* O. Kuntze
2. *Puraria tuberosa*, DC.

It consists of five chapters, each of which is briefly described below:

**CHAPTER-1**

**INTRODUCTION**

This chapter deals with the importance of medicinal plants. It includes an account of the numerous physiological activities with special reference to flavonoidal constituents from plant origin right from primitive age. It provides an updated account of recent phytochemical examination carried out on the Leguminosae family. It also incorporates the applications of modern techniques for separation, isolation and structural characterisation of bioactive constituents.

**CHAPTER-2**

**ISOLATION AND CHARACTERISATION OF A NEW ANTIBACTERIAL FLAVONE GLYCOSIDE: 5,7,3',5'-TETRAHYDROXY -4'-METHOXY FLAVONE-3'-O-α-L-RHAMNOPYRANOSYL-(1→3)-O-β-D-GALACTOPYRANOSIDE FROM THE SEEDS OF PURARIA TUBEROISA DC.**
Abstract

This chapter includes the isolation and structural elucidation of a new antibacterial flavone glycoside (SL) (yield 0.0223%) molecular formula $C_{28}H_{32}O_{16}$, m.p. 266-267°C and $[M]^+624$ (EIMS) obtained from the ethyl acetate soluble part of ethanolic extract of seeds of this plant. Its structure was established as 5,7,3', 5'-tetrahydroxy -4'-methoxy flavone-3'-O-α-L-rhamnopyranosyl-(1→3)-O-β-D-galactopyranoside on the basis of various colour reactions, alkaline degradations and spectral techniques.

CHAPTER-3

ISOLATION AND STRUCTURAL DETERMINATION OF A NEW ANTIBACTERIAL FLAVONE GLYCOSIDE: 5,2'-DIHYDROXY-3,6,7-TRIMETHOXY FLAVONE-5-O-β-D-XYLOPYRANOSYL -(1→4)-O-β-D-GLUCOPYRANOSIDE FROM THE SEEDS OF BUTEA MONOSPERMA O. KUNTZE.

This chapter incorporates the isolation and structural elucidation of a new antibacterial flavone glycoside (SS) obtained from acetone soluble fraction of the ethanolic extract of the seeds of Butea
monosperma O. Kuntze The compound (SS) (yield 0.0239%) had molecular formula C_{29}H_{34}O_{16}, m.p. 268-269°C and [M]+638 [EIMS]. Its structure was characterised as 5,2'-dihydroxy-3,6,7-trimethoxy flavone-5-O-β-D-xylopyranosyl-(1→4)-O-β-D-glucopyranoside by different colour reactions, alkaline degradations and spectral techniques.

CHAPTER-4

ISOLATION AND STRUCTURAL ELUCIDATION OF A NEW ANTIFUNGAL FLAVONOL GLYCOSIDE: 3,5,4'-TRIHYDROXY-7,3'-DIMETHOXY FLAVONE-3-O-β-D-XYLOPYRANOSYL-(1→2)-O-α-L-RHAMNOPYRANOSIDE FROM THE SEEDS OF NEPTUNIA OLERACEA LOUR.

A new antifungal flavonol glycoside (LS) (yield 0.0212%) molecular formula C_{28}H_{32}O_{15}, m.p. 248-250°C and [M]+608 (EIMS) isolated from the chloroform soluble fraction of ethanolic extract of this plant. On the basis of various colour reactions, alkaline degradations and spectral techniques, its structure was identified as 3, 5, 4'-tri hydroxy-7, 3'-dimethoxy flavone-3-O-β-D-xylopyranosyl-(1→2)-O-α-L-rhamno pyranoside.
CHAPTER 5

ISOLATION AND STRUCTURAL ELUCIDATION OF A NEW ANTIFUNGAL FLAVONE GLYCOSIDE: 5,7-DIHYDROXY-3, 6,4'-TRIMETHOXY FLAVONE-7-O-α-L-ARABINOpyranosyl-(1→4)-O-α-L-RHAMNOpyranosyl-(1→3)-O-β-D-XYLOpyranoside, FROM THE FLOWERS OF BUTEA MONOSPERMA O.KUNTZE.

A new antifungal flavone glycoside (LT) (yield 0.0234%) obtained from methanol soluble fraction of the methanolic extract of the flowers of this plant which had molecular formula C₃₄H₄₂O₁₉, m.p. 260-262°C and [M]+ 754 (EIMS). Its structure has been characterised as 5,7-dihydroxy-3, 6,4'-trimethoxy - flavone-7-O-α-L-arabinopyranosyl-(1→4)-O-α-L-rhamnopyranosyl - (1→3)-O-β-D-xylopyranoside by various chemical degradations, colour reactions and spectral analysis.