

## EXTRACTION OF ANTI-DIABETIC COMPOUND FROM SYZYGIUM CUMINI

R.RAJALASHMI, R.ELAKIYA, M.JAGADEESWARI

Department of biomedical engineering, Vel tech multi tech Dr.Rangarajan , Dr.Sakunthala engineering college, affiliated to anna university, Chennai tamilnadu , India.

Syzygium cumini was used as a traditional medicine to treat various diseases. Present studies were carried out to isolate and identify the bio-active component from the Syzygium cumini seed, bark and leaves individually. In this study, mixture of seed, bark, leaves dried powder extracted in ethyl acetate and fresh leave, bark mixture were extracted with water which were used to analyze the antioxidant activity. Extracted compound of Syzygium cumini mixture was undertaken to column chromatography which was employed to evaluate the absorption rate in spectrophotometer. The result showed that wavelength from 433nm to 473nm, absorption rate was at a peak which was observed from spectrophotometer for aqueous extract. Comparatively, absorbance in ethyl acetate extract was lower than the aqueous extract which showed that the aqueous extract has a greater effect than the ethyl acetate extract. DPPH assay shows that the inhibition is higher in the ethyl acetate than the aqueous extract. When the concentration increases, rate of inhibition also increases. Extracts were undertaken for photochemical screening which showed the presence of phenol, flavonoids , alkaloids, steroids , glycosides, terpenoids , tannins. Then, the extracts were analyzed for antioxidant activity. As a result, they could be used as antidiabetic drug was proven.