

Phytochemical and Biological Evaluation of Derris scandens

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Abstract : The phytochemical and biological evaluation of the whole plant of Derris scandens is belonging to the family fabaceae. The dried plant of D.scandens was procured from the tirumala. The completely dried powder of the whole plant was taken and ground to a coarse powder which was then subjected to Soxhlet extraction with hexane and chloroform successively for 36 hrs. Chloroform extract was filtered and concentrated by using rotary evaporator an about 100g extract was obtained. The chloroform extract was subjected to column chromatographed over silicagel. From the column chromatography seven compounds were isolated named as osajin, scandinone, scandenone, 4,5,7-tri hydroxy biprenyl isoflavone, derris isoflavone-A, scandenin and isoscandinone. D.scandens resulting in the isolation of seven compounds in the plant was confirmed by spectral data (1H NMR, 13C NMR, ESI-MS and FTIR). The isolated compounds were screened for antioxidant activity, antidiabetic activity, α -glucosidase (inhibitory activity) and anti-bacterial activity. The isolated seven compounds were tested for α -glucosidase inhibitory activity and antioxidant activity. All the seven compounds showed good α -glucosidase inhibitory activity and moderate antioxidant activity.

Keywords : Derris scandens, phytochemical, antioxidant, antidiabetic, antibacterial activity

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