

Comparison of the hypoglycaemic effect of aqueous extracts of natural plant and calli of *Munronia pinnata* in alloxan induced Diabetic Wistar rats

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 $M_{herbs}^{unronia\ pinnata\ (wall)} Theob.\ (Family-Maliaceae)\ locally\ called\ as "Bin\ kohomba"\ is\ one\ of\ the\ most\ demanded\ herbs\ in\ the\ Sri\ Lankan\ drug\ market\ which\ is\ listed\ under\ threatened\ category\ due\ to\ overexploitation.\ Hence,\ there\ is\ an\ urgent\ need\ to\ adopt\ ex\ situ\ conservation\ methods\ via\ in\ vitro\ propagation\ techniques.\ The\ possible\ use\ of\ calli\ as\ a\ substitute\ for\ whole\ plants\ has\ been\ quarried.\ Despite\ its\ long\ record\ of\ usage\ in\ indigenous\ clinical\ practices,\ biological\ activities\ of\ M.\ pinnata\ have\ not\ been\ investigated\ so\ far.\ The\ purpose\ of\ the\ present\ study\ was\ thus\ to\ compare the\ hypoglycaemic\ effect\ of\ aqueous\ extracts\ of\ natural\ plants\ and\ 3-\ months'\ old\ calli\ of\ M.\ pinnata\ in\ alloxan\ induced\ diabetic\ Wistar\ rats.\ Three\ leaflet\ types\ of\ natural\ plants\ and\ 3-\ months'\ old\ calli\ of\ M.\ pinnata\ were\ used\ for\ the\ preparation\ of\ aqueous\ extracts\ so\ natural\ plants\ and\ 3-\ months'\ old\ calli\ of\ M.\ pinnata\ were\ used\ for\ the\ preparation\ of\ aqueous\ extracts\ were\ administered\ to\ healthy\ and\ calli\ of\ M.\ pinnata\ were\ used\ for\ the\ preparation\ of\ aqueous\ extracts\ were\ administered\ to\ healthy\ and\ adueous\ extracts\ were\ administered\ to\ healthy\ and\ aquurvedic\ anti\ diabetic\ Wistar\ rats\ with\ different\ doses.\ Hypoglycaemic\ extracts\ so\ to\ extracts\ were\ administered\ to\ healthy\ and\ aqueous\ extracts\ were\ administered\ to\ healthy\ and\ aqueous\ extracts\ were\ administered\ to\ healthy\ add adueous\ extracts\ were\ administered\ to\ healthy\ add adueous\ extracts\ were\ administered\ to\ healthy\ add adueous\ extracts\ were\ administered\ to\ healthy\ add\ adueous\ extracts\ were\ administered\ to\ healthy\ add\ adueous\ extracts\ adueous\ extracts\ were\ administered\ adueous\ extracts\ adueous\ adueous\ ex$

Biography

Swarna D. Hapuarachchi, is a senior Lecturer in Department of Materia Medica, Institute Indigenous Medicine, University of Colombo, Sri Lanka. She got BAMS from Institute of Indigenous Medicne, University of Colombo, Sri Lanka, (1990), M.D. (Materia Medica) from Banaras Hindu University, India (1998) and M.Sc. (Plant Sciences) University of Peradeniya, Sri Lanka (2007). She has established a tissue culture laboratory in her institute in order to carry out further studies on tissue cultured plants and natural plants and also their biological activities. At present, she is preparing for Ph.D. at the Department of Biochemistry, University of Sri Jayewardenepura, Sri Lanka.