W.L.R. KEERTHIRATHNA¹, D.D.B.D PERERA¹, D.M.I.H. DISSANAYAKE¹, L.D.C.PEIRIS¹

¹Department of Zoology (Center for Algal Research), University of Sri Jayewardenepura, Gangodawila, Nugegoda, 10250, Sri Lanka, Email: rangee9183@gmail.com

Hypoglycemic and hypolipidemic properties of hot infusion from *Nyctanthes arbor-tristis* L. (Night Jasmin) in adults: phase I clinical trial

Hot flower infusion of Nyctanthes abor-tristis (Family: Oleaceae) has been used in traditional medicine for centuries to manage diabetes and high cholesterol. A phase I double-blinded randomized controlled clinical trial involving 15 healthy adults (age 20-30 years) was conducted to evaluate the hypoglycemic and hypolipidemic properties in hot infusion. Volunteers were treated either with 100mg/dl (dose based on previous animal studies) of hot infusion or distlled water (control) for 15 consisecutive days. On days 1 and 15, plasma glucose level (PGL) and liver and kidnehy toxicity [ALT (Alanine Aaminotransferase), AST (Aspartate Aminotransferase), ALP (Alkaline Phosphatase), Creatinine and GFR (Glomeruala Filtration Rates)] in blood collected from fasted patients was analyzed. Total cholesterol (TC), HDL-CH (high-denity lipoproteins), LDL-CH (low-density lipoproteins) and try-glyceraldehyde were also evaluated. Hot infusion significantly (p<0.01) decreased PGLs, TC and triglyceride levels by 8%, 17.6% and 25.2% respectively. LDL-CH, HDL-CH, serum creatinine, ALT, AST levels or GFR (>90%) remained unaltered. In conclsion, hot infusion of N.abortristis is an effective anti-hyperlipidemic and hypoglycemic agents and future development of therapeutic agents are recommended.

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