



Effect of *Sutherlandia frutescens* and *Hypoxis hemerocallidea* Extracts on Inflammatory Markers *In Vitro*

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SUMMARY. Immunomodulating effects of *Hypoxis hemerocallidea*, *Sutherlandia frutescens* and standard compounds found in these plants were determined. Neither of the extracts, nor the standard compounds were cytotoxic to THP-1 and U937 macrophages. Antioxidant activity of *H. hemerocallidea* was equivalent to 0.2 mg/mL Trolox. Canavanine showed antioxidant activity comparable to that of curcumin (positive control). Curcumin (9.2 µg/mL) and beta-sitosterol (12.5 µg/mL) reduced IL-1β and IL-8 production significantly ($p < 0.05$) and decreased the production of TNF-α. Beta-sitosterol (25 µg/mL) and pinitol (50 µg/mL) significantly ($p < 0.01$) decreased extracellular PGE₂ levels in U937 macrophages by 12 % and 14 %, respectively. From the current results it would appear that the standard compounds present in the plants are far more effective in modulating the immune system than the extracts.

KEY WORDS: Antiinflammatory, Antioxidant, Cytokines, Prostaglandins, Traditional medicine.

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