PHYTOCEE®

Macrophage Phagocytosis Potential of PHYTOCEE®

OBJECTIVE

To evaluate the macrophage activating property of PHYTOCEE® in a macrophage phagocytosis assay using J774A.1 murine macrophages

MATERIALS AND METHODS

The assay was performed as per standardized kit protocol. Briefly, J774A.1 cells were plated in 96 well plates on day 0 (0 hrs) at 1 X 105 cells/well in DMEM medium containing 10% fetal bovine serum. The plates were incubated for one hour at 37ºC in a CO2 incubator (5% Co2). Samples, at various concentrations, were added onto the cells and the cells were incubated for 1 hr at 37ºC (5% Co2). After 1 hr, 25 µl of fluorescent bioparticles were added onto the macrophages and cultures were re-incubated for 2 hrs at 37ºC in a Co2 incubator (5% Co2). At the end of 2 hrs, the supernatant was discarded. Trypan blue was added onto the cells and incubated further for 1 min. Trypan blue was removed and the fluorescence was measured in a fluorescent plate reader at an excitation of 485nm and an emission of 520nm.

RESULTS

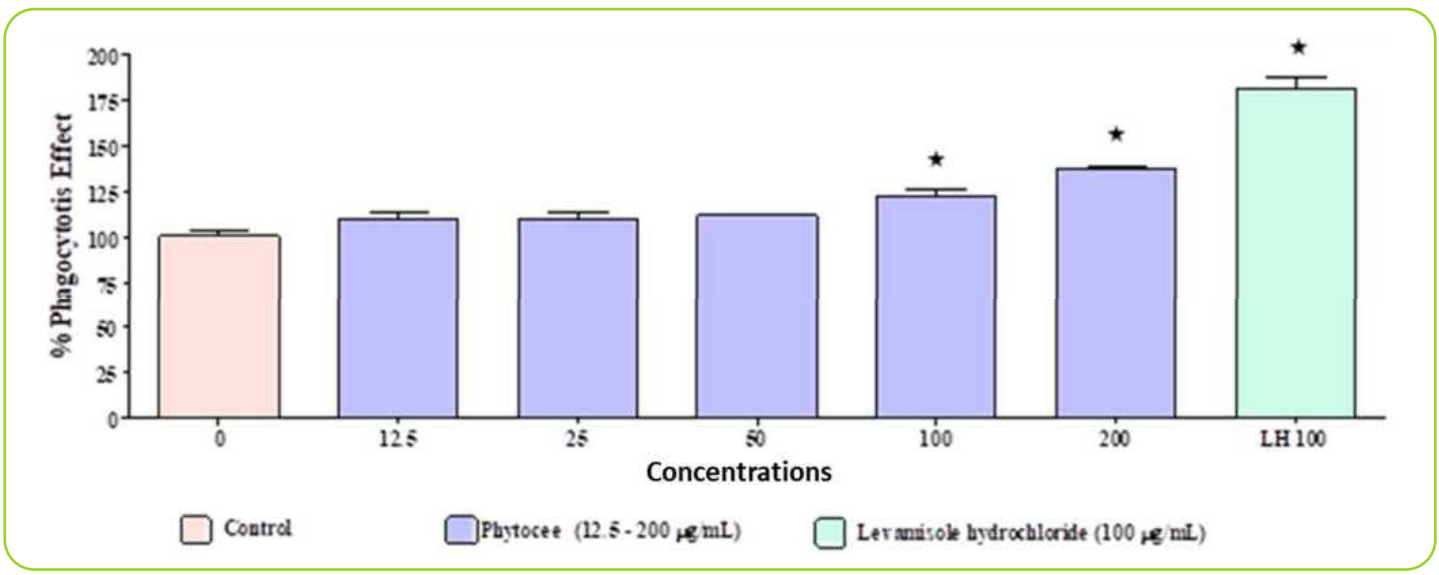

Figure: Effect of PHYTOCEE® on phagocytosis of fluorescently labelled *E. coli* by J774A.1 murine macrophages

LH, Levamisole hydrochloride; *p<0.05

CONCLUSIONS

PHYTOCEE® treatment resulted in a significant increase in macrophage phagocytosis at the highest tested concentrations viz. 100 and 200 µg/mL.

OUTCOME

Hence, PHYTOCEE® possess macrophage activating potential.