

PRELIMINARY PHYTOCHEMICAL SCREENING AND EVALUATION OF ANTHELMINTIC PROPERTY OF *Embelia Ribes* Burn. (IN VITRO)

Linthuja Y.^{1*} Thayalini, T¹, and Kokulavashiny, V.²

¹Unit of Siddha Medicine, University of Jaffna, Sri Lanka

²Rural Ayurvedic Hospital, Thampiluvil, Sri Lanka

*yogalinthuja@gmail.com

Helminthiasis is one of the most common parasitic infections worldwide. "Although antihelminthic drugs are used to treat helminthiasis, they were attributed to severe side effects. As a result, finding an alternative drug for the treatment of helminths from natural resources is inevitable. This study aimed to evaluate the anthelmintic potential of *E.ribes* and its phytochemical composition. Decoction and methanolic extract of seed of *E.ribes* were prepared and subjected to in vitro evaluation of anthelmintic potential against earthworm (*Eisenia fetida*) by analysis the paralysis time and death time. Furthermore, the presence of phytochemicals such as saponin, tannin, flavonoids, glycosides and terpenoids were screened.

Results indicated that both decoction and methanolic extract of *E.ribes* exhibited anthelmintic activity against earthworms on concentration-dependent manner. Moreover, higher concentrations of decoction at 1/5 in dilution showed paralysis and death of the earthworm at 50.36 ± 0.33 minutes and 50.27 ± 0.19 minutes, respectively. Whereas 2.5 mg/ml concentrations of methanolic extract exhibited paralysis and death of the worm at 60.20 ± 0.33 minutes and 60.36 ± 0.19 minutes, respectively. both decoction and methanolic extract contains saponin, tannin, flavonoids and terpenoids. Results revealed that both decoction and methanolic extract of *E.ribes* exhibited anthelmintic activity against earthworms, however, further experimentation with other helminths need to be evaluated in the future.

Keywords: Anthelmintic, *Embelia ribes*, Decoction Methanolic extract, Phytochemicals