

## The invitro ascaricidal efficacy of erythrina abyssinica extracts

Charles Lagu\*, FIB Kayanja<sup>1</sup>

\* Department of Biology, Faculty of Science, P.O.Box 1410, Mbarara University of Science and Technology; <sup>1</sup> Department of Anatomy, Faculty of Medicine, P.O.Box 1410, Mbarara University of Science and Technology, Mbarara Corresponding author: [chlaguu@gmail.com](mailto:chlaguu@gmail.com) 13

### Abstracts

The antihelminthic efficacy of *Erythrina abyssinica* (Leguminosae) used in the control of worms in indigenous chicken was conducted in the Pharmacology Department of Faculty of Veterinary Medicine, Makerere University. The study hypothesized that Plants with known but undocumented anthelmintic activity exist in the south western agro-ecological zone of (SWAEZ) of Uganda. The efficacy of medicinal plant varies with the location in the SWAEZ. The study aimed to investigate the invitro efficacy of *Erythrina abyssinica* against *Ascaridia galli*. *Ascaridia galli* was used as a model for the in vitro study. The research findings showed that the leaves, root bark and stem bark had activity against *A.galli* ( $P < 0.05$ ). Leaves extracts had comparable efficacy to conventional *piperazine citrate* with minimum dose level of 2.30-9.69 mg/ml to achieve 50% mortality (ED50) compared to stem barks (2.93-13.57mg/ml) and root barks (7.99-24.39 mg/ml). There was statistically insignificant differences ( $p > 0.05$ ) in activity against *Ascaridia galli* by root barks, stem barks and leaves extract across districts in Bushenyi, Mbarara, Ntungamo and Rakai. The study validates the use of *Erythrina abyssinica* by the farmers to control worms in local chicken. The study recommends further study to undertake acute toxicity tests to establish safety of the plant extracts. The use *Erythrina abyssinica* leaves other than root or stem is sustainable way of conserving the plant.

Keywords: Antihelminthic, *Erythrina abyssinica*, *Ascaridia galli*, Effective dose (ED50), Motility