

## ABSTRACT

The plant *Securidaca longepedunculata* (Fres.) (Polygalaceae) is known to have various ethno-pharmacological and pesticidal properties including its indigenous use by small-scale African farmers for stored product pest control. This paper presents study of four stored grain insect pest species, *Sitophilus zeamais*, *Rhyzopertha dominica*, *Callosobruchus maculatus* and *Prostephanus truncatus*, and showed that powdered roots of *S. longepedunculata* admixed with commodity at 0.5 % w/w was effective at reducing the F<sub>1</sub> emergence of all four insect species when compared to untreated commodity trials. A methanol extract of *S. longepedunculata* roots sprayed on to commodity at 0.1 % w/w was equally effective at reducing F<sub>1</sub> emergence when compared to the control. Bioassay guided fractionation of the methanol extract showed that the most polar compounds in the roots were responsible for the reduction of live adults in the F<sub>1</sub> generation. The implications of these results are discussed in the context of isolating and characterising biologically active compounds with a view to improving stored product pest control by small-scale farmers in developing countries.