

## Abstract

Food spoilage and poisoning pathogens lead to pre- and post-harvest losses of crop produce and poisoning of food and feed stuff; posing a great threat to food security and safety worldwide. This project aimed to investigate the pesticidal activity and presence of chemical compounds in *Vernonia glabra*; as an alternative control approach, to food crop protection. Organic extracts of leaves and flowers showed the highest activity against *S. aureus* (mean inhibition zones of 1.85 and 1.78 respectively), than the standard antibiotic (Streptomycin 1.30). Flavonoids were greatly present in all extracts screened. The results of this study justify the use of *V. glabra* in traditional herbal medicine, and suggest that the plant has ideal characteristics in the application as bio-pesticide control to crops and food stuff.