

RESEARCH

My research focus is on natural product chemistry/drug discovery involving phytochemical screening, anthelmintic screening and chromatographic separation of bioactive molecules in medicinal plants. I am also involved in developing alternative assay methods for quantitative analysis of drug molecules.

(a) Completed

1. Literature review of *Brillantasia* species.
2. Isolation and characterization of an anthelmintic proanthocyanidin from *Khaya senegalensis* (Meliaceae).
3. Antioxidant capacity profiling of ascorbic acid using proton transfer kinetics data.
4. Sensitive spectrophotometric determination of aceclofenac following azo dye formation with 4-carboxyl-2, 6-dinitrobenzenediazonium ion.
5. Colorimetric determination of nifedipine using 4-carboxyl-2, 6-dinitrobenzene diazonium ion.
6. Antimicrobial and pharmaceutical properties of *Leucaena leucocephala* seed oil.
7. Antimicrobial activities of *Garcinia kola* seed oil against some clinical microbial isolates.
8. Comparative studies on the crude and refined oil of *Garcinia kola* Heckel (Guttiferae) seed.
9. Chromatographic fractionation and bioactivity study of *Vernonia amygdalina* leaf extracts using *Haemonchus placei* adult worm motility anthelmintic assay.
10. Antimicrobial evaluation of *Nauclea diderrichii* (de wild & merrill) leaf extracts and fractions against urinary tract infection pathogens.

(b) In progress

1. Bioassay-guided isolation and characterization of anthelmintic compounds from some medicinal plants as supportability tool for organic livestock farming.
2. Isolation of antimicrobial compounds from *Nauclea diderrichii* leaf chloroform extract.

3. Chromatographic fractionation and anthelmintic study of *Nauclea diderrichii* leaf extracts using *Haemonchus placei* adult worm motility anthelmintic assay.

(c) Dissertation and Thesis