

# Growth disruption activity of polar extracts from *Kotschyia uguenensis* (Fabaceae) against *Anopheles gambiae* s.s. (Diptera: Culicidae) larvae

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## Abstract

Studies on the larvicidal properties of extracts and fractions from *Kotschyia uguenensis* Verdc. were done by long-term exposure of *Anopheles gambiae* s.s. larvae. The cumulative mean percentage mortalities and deformities at different concentrations for the extracts and fractions were recorded after every 24 h. Treatment of *A. gambiae* s.s. larvae with *K. uguenensis* extracts showed growth disruption by forming elongated guts and resulting in eventual death. Larvae treated with the methanol extracts from the stem and root barks, and fractions of the former extract attained complete mortality in 6–8 days at 50 and 100 ppm. More deformed larvae were observed from the methanol extract of the stem bark (40%) and methanol-soluble fraction (88%) than those treated with water-soluble fraction (22%) and methanol extract of the root bark (5%). The growth disruption may be associated with constituents in the plant that interfere with the normal endocrine system functions.