Abstract

Three Plumbago spp have been tested for mosquito larvicidal activity. The crude extracts exhibiting the highest larvicidal activity against Anopheles gambiae were hexane ($LC_{50} = 6.4 \mu g/mL$) and chloroform ($LC_{50} = 6.7 \mu g/mL$) extracts from Plumbago zeylanica Linn, chloroform ($LC_{50} = 6.7 \mu g/mL$) extract from Plumbago stenophylla Bull and ethyl acetate ($LC_{50} = 4.1 \mu g/mL$) extract from Plumbago dawei Rolfe. These LC_{50} values were within 95% confidence limits. 5-hydroxy-2-methyl-1,4-naphthoquinone (plumbagin) 1 ($LC_{50} = 1.9 \mu g/mL$) and β -sitosterol 2 were characterised from ethyl acetate extract of root bark of P. dawei, a native medicinal plant growing in Kenya, based on spectral analysis and comparisons with data in literature.