TWO ANTIFUNGAL COMPOUNDS FROM THE ROOTS OF *FERONIA LIMONIA (RUTACEAE)*

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In the course of our studies on the bioactive constituents of Rutaceae, we have earlier isolated 2,6-dimethoxybenzoquinone from the fruit-shells[1], and psoralen from the stem-bark[2] of *F.limonia* (wood apple) as antifungal principles. The petroleum and chloroform extracts of the root-bark also showed activity against *Cladosporium cladosporoides* in the TLC-bioassay. The chromatographic separation of the petroleum extract on a silica gel column furnished a middle fraction (10% ethyl acetate in petroleum) which displayed two distinct zones of inhibition at R_f 0.62 and 0.38 (chloroform) in the *Cladosporium* - bioassay TLC plate. Further separation of this fraction by flash chromatography and TLC afforded the two active compounds as white crystalline solids. The compounds were identified from their spectroscopic data (UV, IR, ^{1}H NMR and mass) as xanthotoxin[3] m.p.144-146°C and osthenol[4] m.p.122-124°C which corresponded to the inhibition areas at R_f 0.62 and 0.38, respectively in the bioassay. These two coumarins also exhibited activity against the following fungi : *Aspergillus niger*, *Colletotrichum gloeosporioides*, *Curvularia sp. and Penicillium sp.*

References

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