Comparative analysis of the oils of three Ficus species from Nigeria

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Abstract: The oil composition of three Ficus species (Moraceae): Ficus lutea Vahl., Ficus polita Valil., and Ficus thonningii Blume., were studied by GC and GC/MS. The main compounds in F. lutea were acorenone B (20.7%) and phytol (16.2%), with significant quantities of demethoxyageratochromene (6.0%), 6, 10, 14-trimethyl-2-pentadecanone (5.1%) and zingiberene (5.2%). However, F. polita had phytol (23.3%) and 6, 10, 14-trimethyl-2-pentadecanone (15.0%) in abundance, in addition to sizeable proportions of (E)-6, 10-dimethyl-5, 9-undecadien-2-one (7.3%) and drimenol (5.8%), while F. thonningii comprised 6, 10, 14-trimethyl-2-pentadecanone (18.8%) and phytol (14.7%). Acorenone B (7.6%) and β-gurjunene (6.3%) were also observed in higher amounts. Phytol and 6, 10, 14-trimethyl-2-pentadecanone seem to be the marker components of Nigerian grown Ficus species as it is evident in this report and previous studies. © 2008 Allured Publishing Corp.

Author Keywords: 6,10,14-trimethy-2-pentadecanone; Acorenone B; Essential oil compostion; Ficus lutea; Ficus polita; Ficus thonningii; Moraceae; Phytol

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