

Volatile Constituents of *Alpinia malaccensis* Rhizomes & Its Antifungal Activity against *Colletotrichum musae* & *Lasiodiplodia theobromae*

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The volatile oil of *Alpinia malaccensis* was isolated using steam distillation & identified using GC-MS. Twenty eight compounds were identified. Major constituent was 1,8-Cineole (31.96%). Antifungal assays were carried out against common banana pathogens, *Colletotrichum musae* & *Lasiodiplodia theobromae*. Minimum inhibition concentration for *Colletotrichum musae* & *Lasiodiplodia theobromae* were 50µg & 100µg respectively. Minimum lethal concentration for *Colletotrichum musae* & *Lasiodiplodia theobromae* were 200µg & 150µg respectively. Antifungal assays were done for the major compound identified, 1,8-Cineole for *Colletotrichum musae* & *Lasiodiplodia theobromae*. *Lasiodiplodia theobromae* didn't show any activity against 1,8-Cineole whereas *Colletotrichum musae* showed Minimum inhibition concentration & Minimum lethal concentration at 25µg & 200µg respectively. This is the first report on the composition & antifungal activity of *Alpinia malaccensis* rhizome oil in Sri Lanka

Key words.

Alpinia malaccensis, 1,8-Cineole, Antifungal assays, *Colletotrichum musae*, *Lasiodiplodia theobromae*, Minimum inhibition concentration, Minimum lethal concentration.