2-Hydroxy-4-methoxybenzaldehyde (1), a compound isolated from *Mondia whytei* (Hook) Skeels (Asclepiaceae) roots exhibited larvicidal activity (LD$_{50}$ 22 mg/mL). A total of 18 other derivatives and closely related congeners revealed varying levels of larvicidal activity. Several closely related congeners, like 2-benzyloxy-4-methoxybenzaldehyde (2), 2-hydroxybenzaldehyde (12), 2-benzyloxybenzaldehyde (3) and benzylphenyl ether (4), showed marked improvement in activity (LD$_{50}$ 10, 9, 4.8, 1.2 mg/mL, respectively) against *Anopheles gambiae* larvae. 2-Benzoyloxy-4-methoxybenzaldehyde (5) exhibited similar activity level (LD$_{50}$ 28 mg/mL) as 1.