Antimicrobial Activity of 2,5-Dihydroxy-3-methyl-1,4-benzoquinone from *Embelia schimperi*

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Chromatographic separation of an ethyl acetate extract from *Embelia schimperi* led to the isolation of a new compound identified as 2,5-dihydroxy-3-methyl-1,4-benzoquinone (**1**) on the basis of spectroscopic and physical data. The plant's crude extract and pure compound **1** were assayed for *in vitro* antimicrobial activity against clinical strains of *Salmonella* spp., *Proteus* spp., *Pseudomonas aeruginosa, Klebsiella pneumoniae, Escherichia coli, Cryptococcus neoformans, Shigella dysentriae* and *Staphylococcus aureus.* Disc diffusion method was used and zones of inhibition, after respective incubation periods, were used to quantify antimicrobial activity. Standard antibiotics namely: augmentin, cotrimoxazole, gentamycin, tetracycline and lyncomycin were used as controls.

The crude extract was inactive while the pure compound **1** showed significant activities against *Salmonella* spp., *Proteus* spp., *Pseudomonas aeruginosa, Klebsiella pneumoniae, Escherichia coli, Cryptococcus neoformans, Shigella dysentriae* and *Staphylococcus aureus* with zones of inhibition ranging from 10–20 mm. The most sensitive microorganism was *P. aeruginosa* while *C. neoformans* was insensitive to both the crude extract and compound **1.**

Key words: *Embelia schimperi*, 2,5-Dihydroxy-3-methyl-1,4-benzoquinone