A novel C-prenylated benzo-lactone possessing antimicrobial activity from the rhizome of *Cissus cornifolia*

Aliyu M Musa¹, Nasir Tajuddeen¹, Abdullahi Y Idris¹, Abdrahman Y Rafindadi¹, Musa I Abdullahi³, Abubakar B Aliyu¹, Mikhaila S Abdullahi³ and Muhammad A Ibrahim¹

¹Ahmadu Bello University, Nigeria  
²Usmanu Danfodio University, Nigeria  
³Nigeria Institute of Leather and Science Technology, Nigeria

A new prenylated benzo-lactone (4,6-dihydroxy-5-methoxy-3-(1,2,3,4,5-pentahydroxypentyl)-2-benzofuran-1(3H)-one) was isolated from the acetone extracts of the rhizome of *Cissus cornifolia* and the structure of the compound was characterized using 1 and 2D NMR data. The antimicrobial activity of the compound was studied using the agar well method. The compound was active against 6 out of 10 tested clinical isolates of some microorganisms including *S. aureus*, *S. typhi* and *C. albicans*. The inhibition zones ranged between 17 and 25 mm against the microorganisms. The compound could serve as a lead for the development of more potent antimicrobial agent. To the best of our knowledge, this is the first report of the isolation and characterization as well as antimicrobial screening of the compound.

Biography

Mohammed Meshal Almutairi, Abdulmajeed Farhan Alenazi, Ahmed Badah Alanazi, Yazen Talal Alenezi and Khalifa Ahmed Alenazi are had recently completed their graduation from Faculty of Medicine, Northern Borders University in 2015 and are currently pursuing Internship year in king fahad army forces hospital in Jeddah, KSA. They are looking forward to complete their post-graduation studies.

ntajuddeen@yahoo.com