

Antimicrobial and Resistance Modulatory Activities of *Corynanthe pachyceras*

Adu Francis, Gbedema Stephen Yao, Annan Kofi

Department of Pharmaceutics;

ABSTRACT

As part of the project to identify plant natural products which modulate bacterial multidrug resistance (MDR) the methanol extract of *Corynanthe pachyceras* (Rubiaceae) K. Schum., were tested for in vitro antibacterial and resistance modifying activities against different bacterial strains including resistant staphylococcus SA1199B, RN4220 and XU212 possessing the Tet(K), Msr(A), and Nor(A) multidrug resistance efflux mechanisms respectively. Using the Micro-well dilution method the MIC of the stem bark extract ranged between 128-512µg/ml against the selected bacteria used. At 10µg/ml, none of the different extracts displayed any antibacterial action but in combination with tetracycline, erythromycin and norfloxacin, the stem bark extract displayed a 2-fold, 4-fold and 8-fold potentiation of activities of these antibiotics against XU212, SA1199B and RN4220 possessing the Tet(K) [tetracycline resistant], Nor(A) [norfloxacin resistant] and Msr(A) [macrolide resistant] transporters respectively.

KEYWORDS

Corynanthe pachyceras . resistance modulators . antibacterial . *Staphylococcus aureus*

REFERENCES

2026 Phcog.Net - All rights reserved. Published on the JrnIXPress platform.