

I Antimicrobial properties of the haemolymph of three species of African Land Snails (*Archachatina marginata*, *Achatina achatina* and *Achatina julica*) found in Abeokuta, Ogun State

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Abstract

The antimicrobial properties of three species of snail haemolymph found in Abeokuta, Ogun State were investigated (*Archachatina marginata*, *Achatina achatina* and *Achatina fulica*). Each species haemolymph was tested against four bacterial strains (*Staphylococcus aureus*, *Enterococcus faecalis*, *Klebsiella pneumoniae* and *Pseudomonas aeruginosa*) and four fungal strains (*Trichophyton rubrum*, *Epidermophyton floccosum*, *Microspora canis* and *Candida albicans*). The result shows that the haemolymph of *A. julica* was observed to have the highest inhibition zone against *E. faecalis* (10mm) and *P. aeruginosa* (8mm) while the least inhibition zone was observed in the haemolymph of *A. marginata* (8mm) and *A. achatina* (*A. marginata* (7mm, 7mm) respectively against this same tested organism but the haemolymph of *A. achatina* showed the highest inhibition zone (7mm) whereas the haemolymph of *A. marginata* showed the highest inhibition zone (12mm) against *K. pneumoniae* while the least inhibition zone was observed in the haemolymph of *A. achatina* (8mm). The haemolymph of *A. achatina* had the highest inhibition zone (13mm, 16mm, 14mm, 16mm) against all the tested fungi respectively while the least inhibition zone (10mm, 10mm) was observed in the haemolymph of *A. marginata* (11mm, 12mm) and *A. fulica* (11mm, 12mm) against *M. canis* and *C. albicans* respectively. The study showed that snail haemolymph had antimicrobial properties and thus may be a potential antibiotic.

Keywords Land Snail, Haemolymph, Antimicrobial properties