



ABSTRACT

The present study was carried out to evaluate the effects of the ethanolic leaf and fruit extracts of *Annona muricata* on the quorum sensing activity of *Chromobacterium violaceum* ATCC 12472 and *Pseudomonas aeruginosa* BIOTECH 1335. The antibacterial activity of the extracts was first determined to rule out the antibacterial-mediated inhibition of quorum sensing against *Pseudomonas aeruginosa*. Upon the discovery of the absence of antibacterial activity of the plant extracts, their quorum-quenching activity was determined against *Chromobacterium violaceum* and *Pseudomonas aeruginosa*. The plant extracts did not inhibit violacein production in *C. violaceum* indicating negative for quorum quenching. The plant extracts did not cause a significant reduction of pyocyanin production in *P. aeruginosa* compared with the control at $P < 0.05$. Therefore, the plant extracts possessed insignificant or no quorum-quenching activity against *Pseudomonas aeruginosa*.

Key terms: quorum quenching, quorum sensing, *Annona muricata*, *Pseudomonas aeruginosa*, *Chromobacterium violaceum*.

