

🖹 De La Salle University - Dasmariñas , **BIOLOGICAL SCIENCES DEPARTMENT**

ANTI-QUORUM SENSING POTENTIAL OF Vitex negundo L.

(Lagundi), Ehretia microphylla Lam. (Tsaang-gubat),

Mentha arvensis L. (Yerba Buena) LEAVES

CRUDE EXTRACTS

A Research Presented to the

Biological Sciences Department

College of Science and Computer Studies

De La Salle University - Dasmariñas

City of Dasmariñas, Cavite

In Partial Fulfilment of the Requirements for the Degree of Bachelor of Science in Medical Biology/

Bachelor of Science in Human Biology

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March 2014



ABSTRACT

Anti-quorum sensing refers to the mechanism that involves prevention of the bacteria's ability to communicate and detect density of their population in given vicinity. Plant extracts, lately, had been found for having the effect on quorum sensing of bacteria through inhibition, thus, this study made use of the methanolic leaf extracts of three of the DOHendorsed medicinal plants namely Vitex negundo L. (Lagundi), Ehretia microphylla Lam. (Tsaang-gubat), Mentha arvensis L. (Yerba Buena) against Chromobacterium violaceum. Preliminary disk diffusion assays revealed anti-quorum sensing potential shown by inhibition of violacein pigment production in C. violaceum while having 3-bromofuran and distilled water as controls. Non-pigmented zones are present among disks of V. negundo L. and E. microphylla Lam. having an average diameter of 10.33 mm and 5.67 mm, respectively. Evidently, from these results, V. negundo L. shows the greatest potential among the methanolic leaf extracts. This study, therefore, showed evidence on the potential of V. negundo L. and E. microphylla Lam. for anti-guorum sensing.



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