

EXPERT ACCEPTABILITY OF IPIL-IPIL (LEUCAENA LEUCOCEPHALA) AND LAUREL (LAURUS NOBILIS) LEAF INCENSE AS A CULEX MOSQUITO REPELLENT

ABSTRACT

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Mosquito-borne diseases are a public-health concern in tropical settings, and interest exists in plant-based alternatives to synthetic repellents. This study developed incense from ipil-ipil (*Leucaena leucocephala*) and laurel (*Laurus nobilis*) leaves and evaluated its acceptability in terms of perceived repellency, aroma, safety, usability, and presentation. The study used a quantitative descriptive design. Ten purposively selected experts—five chemical engineers and five entomologists—evaluated the incense using structured printed or online questionnaires. Chemical engineers assessed formulation, safety, and composition, while entomologists assessed perceived repellency. Weighted mean summarized acceptability, variance assessed response consistency, and an independent t-test at $\alpha = 0.05$ compared the two groups. The incense was rated “Highly Acceptable” by both groups. Chemical engineers gave an overall weighted mean of 3.16 with a variance of 0.174, while entomologists gave a weighted mean of 3.14 with a variance of 0.158. The difference between groups was not statistically significant ($t = 0.217$, critical value = 2.145), indicating similar assessments. Expert ratings were favorable for perceived repellency, aroma, safety, usability, and presentation. However, the survey evidence supports product acceptability only. Objective repellency against *Culex* mosquitoes, chemical safety, exposure risk, and household effectiveness require controlled laboratory and safety testing.

RECOMMENDED CITATION

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