Kalanchoe pinnata as a Natural Antibiotic

Gonzalez Menendez, Emily (School: Escuela Bilingue Especializada en Ciencias y Matematicas Papa Juan XXIII Secundaria)

The global rise in bacterial resistance has spurred the exploration of natural alternatives with potential antimicrobial activity, including Kalanchoe pinnata, a plant traditionally used for medicinal purposes. This study evaluated the effect of its aqueous extract on four clinically significant bacteria, using different concentrations to identify variations in response. The results showed that Escherichia coli, Staphylococcus aureus, and Micrococcus luteus exhibited no inhibition under the evaluated conditions, while Pseudomonas aeruginosa showed inhibition zones ranging from 16 to 30 mm, indicating selective activity of the extract. This difference suggests that the efficacy of K. pinnata depends both on the microorganism and on the type of extract preparation, highlighting the need to explore more efficient extraction methods and compare them with other natural formulations. Taken together, the findings provide preliminary evidence of the specific antimicrobial potential of K. pinnata and underscore the importance of continuing to investigate its role as a possible complementary alternative in the face of growing antibiotic resistance.

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