

Antibacterial Activity of Ethanol Extract from *Kalanchoe daigremontiana* †

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Abstract: *Kalanchoe daigremontiana* has been used in traditional medicine to treat various diseases. This study aimed to determine the antimicrobial activity present in an ethanolic extract from the aerial parts of *K. daigremontiana*. 70% v/v ethanol was used to obtain the extract from dry powder. The antimicrobial activity was evaluated by agar diffusion, and the strains used were *Staphylococcus aureus* ATCC 29213, *S. aureus* methicillin-resistant ATCC 43300, *S. epidermidis* (clinically isolated), *Enterococcus faecalis* ATCC 29212 and *Escherichia coli* ATCC 25922. Petri dishes with 20 ml of Müller Hinton agar medium were streaked with 10⁸ CFU/ml of the bacterial suspension. Wells of 5 mm diameter were inoculated with varying quantities of extract. 70% alcohol was used as a negative control. The incubation period was 24 hours at 37 °C. Results show that the extract was active only against *S. epidermidis*, inhibiting bacterial growth from 500 µg, with a halo of 9 mm. However, between 1000 and 2000 µg a dose-response was not observed (halos 10.3 and 10.0 mm, respectively). Our findings suggest that the ethanolic extract of *K. daigremontiana* possesses antimicrobial properties, although these tests should be expanded and the results confirmed by other methods.

Keywords: *Kalanchoe daigremontiana*; antibacterial activity; ethanol extract.

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Conflicts of Interest

The authors declare no conflict of interest.