A Systemic Review on Aloe arborescens Pharmacological Profile: Biological Activities and Pilot Clinical Trials.

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Abstract
Since ancient times, plants and herbal preparations have been used as medicine. Research carried out in the last few decades has verified several such claims. Aloe arborescens Miller, belonging to the Aloe genus (Family Asphodelaceae), is one of the main varieties of Aloe used worldwide. The popularity of the plant in traditional medicine for several ailments (antitumor, immunomodulatory, antiinflammatory, antilucer, antimicrobial and antifungal activity) focused the investigator's interest on this plant. Most importantly, the reported studies have shown the plant effectiveness on various cancer types such as liver, colon, duodenal, skin, pancreatic, intestinal, lung and kidney types. These multiple biological actions make Aloe an important resource for developing new natural therapies. However, the biological activities of isolated compounds such as glycoprotein, polysaccharides, enzyme and phenolics were insufficient. Considering all these, this contribution provides a systematic review outlining the evidence on the biological efficacy of the plant including the pharmacology and the related mechanisms of action, with specific attention to the various safety precautions, and preclinical and clinical studies, indicating the future research prospects of this plant.

KEYWORDS: Aloe arborescens; biological activity; clinical use; glycoprotein; polysaccharides; safety

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