Chaff-flower (*Achyranthes aspera*): Its pharmacology, disease curing, and therapeutic uses

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Abstract

Wound healing is a natural process; it often becomes sluggish and difficult when an infection occurs or when inflammation persists for an extended period. The demand for new treatments that can both prevent infection and promote tissue repair has grown in recent years due to the rise in antibiotic resistance. A well-known medicinal plant in traditional medicine, *Achyranthes aspera* has drawn interest in contemporary study due to its potential for wound healing and infection prevention. According to studies, its extracts may have antibacterial, antioxidant, and anti-inflammatory properties since they contain significant bioactive substances such as flavonoids, glycosides, alkaloids, and saponins. Laboratory tests have demonstrated enhanced cell motility, which is crucial for tissue regeneration, and efficacy against common wound-associated bacteria. In addition, topical treatment has been shown in animal tests to improve skin strength, shorten healing times, and increase wound contraction. Despite the encouraging early results, further systematic research, safety testing, and clinical trials are still required before normal medical use.

Key words: *Achyranthes aspera*, anti-inflammatory activity, infection control, phytochemicals, wound healing activity