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A Review On API Chrysenthemum Flower As A Herbal Mosquito Repellent

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Abstract: Chrysanthemum flower-derived pyrethrins are plant-derived insecticidal esters widely used for insect control and as the botanical basis of many household repellents. This review summarizes the botanical source, chemical composition, extraction and standardization methods, mechanism of action against mosquitoes, formulation approaches for repellent and insecticidal products, efficacy data, safety and environmental considerations, and regulatory/practical issues for using pyrethrum as an API in mosquito repellent products. Strengths of pyrethrins include rapid knockdown and broad-spectrum action; limitations include photolability and potential aquatic toxicity. The review highlights current gaps — particularly the need for improved stabilization, standardized extraction yields, and comparative field trials — and proposes directions for research and product development.

Keywords: Botanical insecticide, Mosquito repellent, Chrysanthemum cinerariifolium, Pyrethrum, Mosquito repellent

