Ethnopharmacological and Phytopharmaceutical Evaluation of Prosopis cineraria: An Overview and Future Prospects.

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Ethnopharmacological and Phytopharmaceutical Evaluation of Prosopis cineraria: An Overview and Future Prospects.

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Abstract

Background: Prosopis cineraria (L.) Druce ('khejri') is an important tree that occurs worldwide in arid regions. It has been mentioned in the Indian Ayurvedic system of medicines as having several clinical properties. Different parts of this plant are used in India, Pakistan, Bangladesh, the United Arab Emirates, Saudi Arabia and Iran for treating various ailments such as leprosy, leucoderma, dysentery, asthma, bronchitis, piles, jaundice and muscular tremors. Since all parts of the tree are useful, it is called 'Kalp Taru' or 'Wonder Tree' in India. Phytochemical studies of P. cineraria have underlined the presence of various classes of phytochemicals, such as flavone derivatives (prosogerin A, B, C, D and E), alkaloids (spicigerine and prosophylline), tannins (gallic acid), steroids (stigmasterol, campesterol and sitosterol, etc.), fatty acids and amino acids, etc., that have been obtained from different parts of the plant.

Methods: We undertook a comprehensive, critical and systematic literature survey on ethnomedicinal, phytochemical and pharmacological aspects of P. cineraria. Efforts were made

to establish/corroborate the scientific reasons of ethnomedicinal use with the help of published modern studies.

Results: Based on in-depth analysis of more than 200 studies, we were able to corroborate a large number of facts pertaining to uses of different parts of this plant for treating various maladies. Further, it yielded several new insights on phyto-pharmacological aspects of P. cineraria.

Conclusion: Results of this study are useful for commercialization of the products derived from phytochemicals of P. cineraria.

Keywords: Prosopis cineraria; ethanopharmacology; human diseases; nutrition; phytochemistry; thar dessert.

References

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