

Medicinal Properties and Therapeutic Potential of *Fagonia arabica* Linn: A Comprehensive Review

Ibrahim Ahmed SHAIKH^{1,2}, Hanish Singh Jayasingh CHELLAMMAL^{2,3}, Noordin OTHMAN^{4,5},
Basheerahmed Abdulaziz MANNASAEH^{6,2} & Gurmeet Kaur Surindar SINGH^{2,3}*

¹ Department of Pharmacology, College of Pharmacy, Najran University,
Najran 66462, Saudi Arabia,

² Faculty of Pharmacy, Universiti Teknologi MARA (UiTM), Selangor Branch, Puncak Alam Campus,
42300 Bandar Puncak Alam, Selangor, Malaysia.

³ Brain Degeneration and Therapeutics Group, Universiti Teknologi MARA (UiTM),
40450 Shah Alam, Selangor, Malaysia.

⁴ Clinical and Hospital Pharmacy Department, College of Pharmacy, Taibah University,
Al-Madinah Al-Munawwarah, Saudi Arabia.

⁵ Department of Clinical Pharmacy, School of Pharmacy, Management and Science University,
University Drive, Shah Alam, Malaysia.

⁶ Department of Pharmacy Practice, College of Pharmacy, Almaarefa University,
Diriyah, Riyadh 13713, Saudi Arabia.

SUMMARY: *Fagonia arabica*, commonly known as “Dhamasa” is revered in Ayurveda for its multifaceted medicinal properties. Widely used in South Asia and the Middle East, it has been a staple in traditional medicine systems such as Ayurveda and Unani. A comprehensive search was performed using various scientific databases, including PubMed, Scopus, and Google Scholar. Keywords such as “*Fagonia Arabica* Linn.”, “therapeutic potential,” “medicinal properties,” and “phytochemical constituents” were employed to ensure a comprehensive retrieval of relevant literature. Recognized for treating diverse ailments, *F. arabica* has found applications in South Asian communities, Middle Eastern regions, Ayurvedic remedies, and Unani medicine. The plant exhibits a rich history of ethnopharmacological uses across diverse geographic regions. From being a diuretic in India to treating skin diseases and wounds, *F. arabica*'s applications are varied. In Pakistan, it is employed for treating hepatitis, fever, and even serves as an immunomodulator. The plant's extensive use encompasses regions like Libya and Saudi Arabia, where it is used as an antihypertensive, antibacterial and antioxidant. The chemical composition of *F. arabica* includes flavonoids, triterpenoidal glycosides, and saponins. These compounds contribute to the plant's antioxidant activity, making it a potent natural remedy. *F. arabica* has a spectrum of pharmacological activities, including anti-inflammatory, anti-allergic effects, neuroprotective and cytotoxic activity. The plant's role as an immunomodulator, deobstruent, analgesic, neuroprotective, and hepatoprotective adds to its pharmacological significance. In conclusion, *F. arabica* stands as a medicinal marvel with a rich history of traditional use and a promising array of pharmacological benefits.

RESUMEN: *Fagonia arabica*, comúnmente conocida como “Dhamasa”, es venerada en Ayurveda por sus propiedades medicinales multifacéticas. Ampliamente utilizado en el sur de Asia y Medio Oriente, ha sido un elemento básico en los sistemas de medicina tradicional como Ayurveda y Unani. Se realizó una búsqueda exhaustiva en varias bases de datos científicas, incluidas PubMed, Scopus y Google Scholar. Se emplearon palabras clave como “*Fagonia arábica* Linn”, “potencial terapéutico”, “propiedades medicinales” y “componentes fitoquímicos” para garantizar una recuperación completa de la literatura relevante. Reconocida por el tratamiento de diversas dolencias, *F. arabica* ha encontrado aplicaciones en las comunidades del sur de Asia, las regiones del Medio Oriente, los remedios ayurvédicos y la medicina Unani. La planta exhibe una rica historia de usos etnofarmacológicos en diversas regiones geográficas. Desde ser un diurético en la India hasta el tratamiento de enfermedades y heridas de la piel, las aplicaciones de *F. arabica* son variadas. En Pakistán se emplea para tratar la hepatitis, la fiebre e incluso sirve como inmunomodulador. El uso extensivo de la planta abarca regiones como Libia y Arabia Saudita, donde se utiliza como antihipertensivo, antibacteriano y antioxidante. La composición química de *F. arabica* incluye flavonoides, glucósidos triterpenoidales y saponinas. Estos compuestos contribuyen a la actividad antioxidante de la planta, lo que la convierte en un potente remedio natural. *F. arabica* tiene un espectro de actividades farmacológicas, que incluyen efectos antiinflamatorios, antialérgicos, actividad neuroprotectora y citotóxica. El papel de la planta como inmunomodulador, desobstruyente, analgésico, neuroprotector y hepatoprotector se suma a su importancia farmacológica. En conclusión, *F. arabica* es una maravilla medicinal con una rica historia de uso tradicional y una prometedora gama de beneficios farmacológicos.

KEYWORDS: , cytotoxic, *Fagonia arabica*, medicinal properties, neuroprotective herbal medicine.

* Author to whom correspondence should be addressed. E-mail: gurmeet9952@uitm.edu.my