

# Argemone Mexicana Linn: A Comprehensive Pharmaceutical Review

**Prof. Gita B Nhavale, Dr. Abhishek Kumar Sen, Ms. Akshada Sopan Morage**

Pratibhatai Pawar College of Pharmacy Shirampur, Ahilyanagar, Maharashtra, India

**Abstract:** *Argemone mexicana* Linn., commonly known as Mexican prickly poppy or Satyanashi, is an important medicinal plant of the Papaveraceae family with extensive traditional and contemporary pharmaceutical applications. This plant has been utilized in Ayurvedic, Siddha, Unani, and homeopathic systems of medicine for treating various ailments including cancer, microbial infections, inflammation, ulcers, and dermatological conditions. The present review comprehensively examines the phytochemistry, pharmacology, toxicology, and therapeutic potential of *A. mexicana*. The plant contains diverse bioactive alkaloids including berberine, sanguinarine, protopine, and chelerythrine, along with flavonoids, terpenoids, and phenolic compounds. Extensive pharmacological studies demonstrate significant antioxidant, antimicrobial, hepatoprotective, anti-inflammatory, anticancer, and antidiabetic activities. However, the presence of toxic alkaloids such as sanguinarine necessitates careful safety evaluation and standardization. This review synthesizes current knowledge regarding the chemistry, pharmacology, traditional uses, and safety concerns of *A. mexicana*, highlighting its pharmaceutical potential and identifying gaps for future research.

**Keywords:** *Argemone mexicana*, alkaloids, berberine, sanguinarine, pharmacology, toxicity, traditional medicine

