

# Pharmacognostic and Pharmacological Study of "Azadirachta Indica" Bark Extracts

Dipika U. Gite<sup>1</sup>, Dr. Kazi Mehraj Abukalam<sup>2</sup>, Dr. Annasaheb B.Jagnar<sup>3</sup>

Department of Pharmacy, Shri JTT University, Jhunjhunu, Rajasthan, India<sup>1,2</sup>

Department of Pharmaceutical Chemistry, Amrutvahini Institute of Pharmacy, Sangamner, MS, India<sup>3</sup>

dipikagite2201@gmail.com

**Abstract:** *Azadirachta indica* A. Juss (Meliaceae) commonly known as Neem, is found throughout India and is known to have many wonderful properties from ancient times. These *A. indica* shows different medicinal properties like antiulcerogenic, hypoglycemic, insecticidal, spermicidal actions. The stem bark was studied for morphological as well as microscopical characteristics. The present work was carried out on bark of *Azadirachta indica* belonging to family Meliaceae. The study was done on pharmacognostic, phytochemical and pharmacological studies on stems bark of *Azadirachta indica* collected from Sangamner of Ahmednagar district. Preliminary phytochemical screening of extract was done. Some part of extract was then used to study pharmacological screening of anti-anxiety activity. From the study of phytochemical and pharmacological investigation of *Azadirachta indica* bark it was found that different chemicals are present as glycosides, alkaloids, tannins, fats, steroids, proteins, etc. *Azadirachta indica* stem bark supports the elimination of related anxiety associated materials. Therefore, drawing conclusions from this research suggests that *Azadirachta indica* hydroethanolic extract were found to be with good antianxiety like activity in elevated plus maze model. Furthermore, this current study confirms the conventional utilisation of *Azadirachta indica* bark as a pain reliever by showing that its hydroethanolic determine has noteworthy analgesic properties for various dose amounts, with the greatest analgesic movement observed at a 60-minute time interval. More research is required, nevertheless, to determine how precisely it exerts its analgesic effects.

**Keywords:** *Azadirachta indica*, anti-anxiety, hydroethanolic, analgesic effects