IJARSCT



International Journal of Advanced Research in Science, Communication and Technology (IJARSCT)

International Open-Access, Double-Blind, Peer-Reviewed, Refereed, Multidisciplinary Online Journal

Volume 4, Issue 2, January 2024

Review on Antifungal Activity of Some Medicinal Plant Extract of Amaranthaceae

Suchita Shete¹, Dr. Ganesh Dama², Dr. Bidkar J. S.³

Department of Pharmacognosy Sharadchnadra Pawar College of Pharmacy, Otur, Maharashtra, India

Abstract: A member of the Amaranthaceae family, Amaranthusviridis L. is related to the "Chowlai" plant, a popular weed and wild vegetable. The viridis is composed of many different substances, such as the amino acids lysine, histidine, cystine, arginine, phenylalanine, leucine, isoleucine, methionine, valine, tyrosine, and threonine. Phytochemical screening of leaf extract from Amaranthusviridis Linn. reveals the presence of biologically active components, including triterpenes, alkaloids, cardiac glycosides, flavonoids, tannins, and phenols. Significant anti-inflammatory, antihepatotoxic, anti-ulcer, antiallergic, and antiviral properties are exhibited by certain chemical constituents of Amaranthusviridis Linn. Traditional medicine in India and Nepal uses A. viridis to reduce labor discomfort and serve as an antipyretic. Negritos in the Philippines use the bruised leaves

Keywords: Amaranthusviridis L., anti-inflammatory, antihepatotoxic, anti-ulcer, antiallergic, and antiviral.

REFERENCES

- [1]. Ragupathi G. Neuropharmacological Effects of Methanolic Extract of Leaves of *Amaranthusviridis*. L In Rats & Mice (Doctoral dissertation, The Erode College of Pharmacy and Research Institute, Erode).
- [2]. Brenan, J.P.M. The genus *Amaranthus*in southern Africa. Journal of South African Botany. 1981;47: 451–492
- [3]. Van Wyk BE, Van Staden J. A review of ethnobotanical research in southern Africa. South African Journal of Botany. 2002 Feb 1;68(1):1-3.
- [4]. Reyad-ul-Ferdous M, Shahjahan DS, Tanvir S, Mukti M. Present biological status of potential medicinal plant of *amaranthusviridis*: a comprehensive review. Am J ClinExp Med.2015;3:12-7.
- [5]. Kaur N, Dhuna V, Kamboj SS, Agrewala JN, Singh J. A novel antiproliferative and antifungal lectin from *Amaranthusviridis*Linn seeds. Protein and peptide letters. 2006 Sep 1;13(9):897-905.
- [6]. Kumari S, Elancheran R, Devi R. Phytochemical screening, antioxidant, antityrosinase, and antigenotoxic potential of *Amaranthusviridis* extract. Indian journal of pharmacology. 2018 May;50(3):130.
- [7]. Ammar S, del Mar Contreras M, Belguith-Hadrich O, Bouaziz M, Segura-Carretero A. New insights into the qualitative phenolic profile of Ficuscarica L. fruits and leaves from Tunisia using ultra-high-performance liquid chromatography coupled to quadrupole-time-of-flight mass spectrometry and their antioxidant activity. RSC Advances. 2015;5(26):20035-50.
- [8]. Kumari S, Elancheran R, Devi R. Phytochemical screening, antioxidant, antityrosinase, and antigenotoxic potential of *Amaranthusviridis* extract. Indian journal of pharmacology. 2018 May;50(3):130.
- [9]. Hasan MN, Azam NK, Ahmed MN, Hirashima A. A randomized ethnomedicinal survey of snakebite treatment in southwestern parts of Bangladesh. Journal of traditional and complementary medicine. 2016 Oct 1;6(4):337-42.
- [10]. Topwal M. A review on amaranth: nutraceutical and virtual plant for providing food security and nutrients. Acta scientific agriculture. 2019;3(1):9-15.
- [11]. Muhammad JI, Sumaira H, Zahed M, Farooq A, Amer J. Antioxidant and antimicrobial activities of Chowlai (*Amaranthusviridis*L.) leaf and seed extracts. Journal of Medicinal Plants Research. 2012 Jul 18;6(27):4450-5.

DOI: 10.48175/IJARSCT-15227

ISSN 2581-9429 IJARSCT

IJARSCT



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Volume 4, Issue 2, January 2024

- [12]. Salvamani, S., Gunasekaran, B., Shukor, M.Y., Shaharuddin, N.A., Sabullah, M.K. and Ahmad, S.A., 2016. Anti-HMG-CoA reductase, antioxidant, and anti-inflammatory activities of *Amaranthusviridis*leaf extract as a potential treatment for hypercholesterolemia. Evidence-Based Complementary and Alternative Medicine, 2016.
- [13]. Kumar BS, Lakshman K, Jayaveera KK, Shekar DS, Muragan CS, Manoj B. Antinociceptive and antipyretic activities of *Amaranthusviridis*Linn in different experimental models. Avicenna journal of medical biotechnology. 2009 Oct;1(3):167.
- [14]. Sundarrajan T, Velmurugan V, Jothieswari D. Hepatoprotective Activity of Ethanol Extracts of *Amaranthusviridis*Linn on Aflatoxcin B[^] sub 1[^] Induced Rats. Journal of Pharmaceutical Sciences and Research. 2017 Oct 1;9(10):1899-902. Kiritikar KR, Basu BD. Indian Medicinal Plants. Vol. 3. 2nded. In: Kirtikar KR, Basu BD (eds). Dehra Dun, India:International book distributors; 1987, 2061-2062.
- [15]. Ragupathi G. Neuropharmacological Effects of Methanolic Extract of Leaves of *Amaranthusviridis*. L In Rats & Mice (Doctoral dissertation, The Erode College of Pharmacy and Research Institute, Erode).
- [16]. Brenan, J.P.M. The genus *Amaranthus* in southern Africa. Journal of South African Botany. 1981;47: 451–492
- [17]. Van Wyk BE, Van Staden J. A review of ethnobotanical research in southern Africa. South African Journal of Botany. 2002 Feb 1;68(1):1-3.
- [18]. Reyad-ul-Ferdous M, Shahjahan DS, Tanvir S, Mukti M. Present biological status of potential medicinal plant of *amaranthusviridis*: a comprehensive review. Am J ClinExp Med.2015;3:12-7.
- [19]. Kaur N, Dhuna V, Kamboj SS, Agrewala JN, Singh J. A novel antiproliferative and antifungal lectin from *Amaranthusviridis*Linn seeds. Protein and peptide letters. 2006 Sep 1;13(9):897-905.
- [20]. Kumari S, Elancheran R, Devi R. Phytochemical screening, antioxidant, antityrosinase, and antigenotoxic potential of *Amaranthusviridis* extract. Indian journal of pharmacology. 2018 May;50(3):130.
- [21]. Ammar S, del Mar Contreras M, Belguith-Hadrich O, Bouaziz M, Segura-Carretero A. New insights into the qualitative phenolic profile of Ficuscarica L. fruits and leaves from Tunisia using ultra-high-performance liquid chromatography coupled to quadrupole-time-of-flight mass spectrometry and their antioxidant activity. RSC Advances. 2015;5(26):20035-50.
- [22]. Kumari S, Elancheran R, Devi R. Phytochemical screening, antioxidant, antityrosinase, and antigenotoxic potential of *Amaranthusviridis* extract. Indian journal of pharmacology. 2018 May;50(3):130.
- [23]. Hasan MN, Azam NK, Ahmed MN, Hirashima A. A randomized ethnomedicinal survey of snakebite treatment in southwestern parts of Bangladesh. Journal of traditional and complementary medicine. 2016 Oct 1;6(4):337-42.
- [24]. Topwal M. A review on amaranth: nutraceutical and virtual plant for providing food security and nutrients. Acta scientific agriculture. 2019;3(1):9-15.

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