

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

Volume 2, Issue 1, June 2022

Anti-Diabetic Action of Syzygium cumini

Rupesh R. Kurhade¹, Shubham Gunjal², Aman R. Momin.³, Shailesh K. Zaware⁴, Rohit H. Phapale⁵ Samarth Institute of Pharmacy, Belhe, Maharashtra, India^{1,2,3,4,5}

Abstract: Recently with the changes in population lifestyle, prediabetes is constantly on the rise. Management of prediabetes currently is with lifestyle modifications like weight loss, exercise and diet control. Better drugs with acceptable safety profile are needed for better control of prediabetes. This study was thus designed to evaluate the antihyperglycemic effect of one such potential compound Syzygium cumini (SC) (Jamun) in comparison to conventional antidiabetic drug Metformin. Plants have provided mankind with herbal remedies for many diseases for many centuries and even today. They continue to play a major role in primary healthcare as therapeutic remedies in developing countries. In India herbal medicines have been the bases of treatment and cure for various diseases in traditional methods practiced such as Ayurveda, Unani and Sidha. Syzygium cumini (syn.Eugenia Jambolana) commonly known as a "Jamun" having promising therapeutic value with its various phytoconstituents such as Tannins, Alkaloids, Steroids, Flavonoids, Terpenoids, Fatty acids, Phenols, Minerals, Carbohydrates and Vitamins. Its pharmacological actions like hypoglycaemic, diuretics, analgesic, anti-inflammatory, antiplaque, antimicrobial, antidiarrheal, antioxidant, Astro-protective and astringent to bowels proven on animal models. Most importantly the studies have shown that it protects against the radiation induced DNA damage and it has significantly decreased the fertilizing capacity of the male albino rats, some clinical trial reports are also available for its antidiabetic activity.

Keywords: Prediabeties, Syzygiumcumini, Ayurveda, Unani, Sidha, Jamun, etc.

REFERENCES

- Anti-diabetic activity of Syzygium cumini and itsisolated compound against streptozotocin-induced diabetic rats A. Kumar, R. Ilavarasan, T. Jayachandran, M. Deecaraman P. AravindanN. Padmanabhanand M. R. V.Krishan September, 2008.
- [2] Herbal medicine: Syzygium cumini: A Review V.M. Jadhav, S.S. Kamble, V.J. Kadam Department of Quality Assurance, Bharati Vidyapeeth's College of Pharmacy, Sector 08 CBD Belapur, Navi- Mumbai – 400614, India, 2Y. M. T. Ayurvedic Medical College, received on 12-04-2009; Accepted on: 03-07-2009.
- [3] Syzygium cumini (L.) skeels: a prominent source of bioactive molecules against cardiometabolic diseasesVinicyus Teles Chagas, Lucas Martins França1,2, Sonia Malik2 and Antonio Marcus de Andrade Paes1,2* 03 November 2015.
- [4] Anti-diabetic activity of Syzygium cumini and its isolated compound against streptozotocin-induced diabetic rats: Ayanagounder Kumar October 2008.
- [5] Anti-diabetic activity of Syzygium cumini and itsisolated compound against streptozotocin-induced diabetic rats A. Kumar 1, R. Ilavarasan, T. Jayachandran, M. Deecarama, P. Aravindan, N. Padmanabhan and M. R. V.Krishan September, 2008.
- [6] Assessment of the antidiabetic activity of Syzygium cumini (Linn.) Skeels in alloxan induced diabetic rats Alimuddin Saifi, Rajani Chauhan, Jaya Dwivedi July -September, 2016.
- [7] Antihyperglycemic Activity of Syzygium cumini (Jamun) in Diabetic RatsSarita Mulkalwar, Vishwanath Kulkarni, Teja Deshpande, Harshavardhan Bhide, Abhi Patel and A. V. Tilak 2021.
- [8] In vivo Anti-diabetic Activity of Hydro-Ethanolic SeedExtract of Syzygium cumini (L.Meharban Asanaliyar and Pratibha Nadig * march2021.
- [9] Antidiabetic Compounds in Syzygium cumini Decoction and Ready to Serve Herbal Drink P. R. D. Perera,1 S. Ekanayake,2 and K. K. D. S. Ranaweera1 9 May 2017.
- [10] A review on the role of jamun, syzygium cumini skeels in the treatment of diabetes Ganesh Chandra Jagetia March 31, 2018.

IJARSCT



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

Volume 2, Issue 1, June 2022