

DR. ADITI NAIK

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AREAS OF SPECIALIZATION:

In-vitro culture studies for biological applications; Medicinal plants & their secondary metabolites; Medical pharmacology; Applied Sciences & toxicology.

RECENT AWARDS / FELLOWSHIPS:

- * Recipient of DST INSPIRE Fellowship granted by Department of Science and Technology, New-Delhi, Government of India.
- * Recipient of CCRT Scholarship to young artist in the field of dance granted by Ministry of Culture, Government of India.
- * Recipient of Young Scientist Award at ‘New Vistas in Botany’ conference organized by Department of Botany, Goa University during 13th-14th February 2020.
- * Best Poster Award (1st position) at International Conference on Natural Science and Green Technologies for Sustainable Development (NTSD-2022) organized by School of Biological Sciences and Biotechnology, Goa University during 30th November-2nd December 2022.

PAPERS PRESENTED AT SEMINARS/CONFERENCES (Selected listed):

1. Naik Aditi Venkatesh and S. Krishnan 2016. “Role of anti-proliferative Annonaceous acetogenins from medicinal plant *Annona muricata*- a Review”. Poster presentation at 7th International conference on Stem cells and Cancer held during 21-23rd October 2016 at Margao, Goa organized by International Centre for Stem Cells, Cancer and Biotechnology (ICSCCB), Pune, India.
2. Naik Aditi Venkatesh and S. Krishnan 2016. “Anatomical characterisation and localization of primary metabolites of medicinal plant *Annona muricata* L. (Annonaceae)”. Oral presentation at XXVI Annual conference of Indian Association for Angiosperm Taxonomy and International seminar on ‘Conservation and Sustainable Utilization of Biodiversity’ held during 7- 9th November 2016 at Shivaji University, Kolhapur, Maharashtra.
3. Naik Aditi Venkatesh and S. Krishnan 2017. “Morphoanatomical characterization and physico-chemical studies of *Annona muricata* L. (Annonaceae) seeds” Poster presentation at National Conference of Young Researchers held during 16-17th March 2017 at Goa University.
4. Naik Aditi Venkatesh and S. Krishnan 2018. “Evaluation of Antioxidant Potential of Plant Parts of *Annona muricata* L. (Annonaceae)” Poster presentation at the 3rd Annual International Conference to be held during 15-16th November 2018 Goa College of Pharmacy, Panaji Goa.
5. Naik Aditi Venkatesh and S. Krishnan 2019. “Phytochemical characterization and in-situ localization of secondary metabolites in medicinal plant *Annona muricata* L.

(Annonaceae)” Oral presentation at the 29th IAAT Annual Conference and National Symposium on Modern Trends in Biosystematics of Angiosperms held during 11th November-13th November 2019.

6. Naik Aditi Venkatesh and S. Krishnan 2020. “Preclinical genotoxic assessment of *Annona muricata* L. leaf and pulp extracts as DNA Damaging Anti-cancer Agent in the Management of Breast Cancer”. Poster presentation at the Plant Genetics and Genomics Conference 2020 organized by Genetic Engineering Association, Department of Genetic Engineering, SRMIST, Kattankulathur- Tamil Nadu held during 23rd and 24th January 2020.
7. Naik Aditi Venkatesh and S. Krishnan 2020. “Preclinical cytotoxic and genotoxic appraisal of *Annona muricata* L. as DNA Damaging Anti-cancer agent in the management of breast cancer”. Young Scientist Award for Oral presentation at the UGC-SAP National Seminar on ‘New Vistas in Botany, 2020’ held during 13th February-14th February 2020.
8. Naik Aditi Venkatesh and S. Krishnan 2022. “Exploring the Callus of *Annona muricata* as a Potential Source of metabolites with Anti-oxidant and Anti-cancer Activity”. Oral presentation at Recent trends in Plant Sciences & Biotechnology (RTPSB, 2022) organized by School of Biological Sciences and Biotechnology, Goa University held during 3rd November-4th November 2022.
9. Naik Aditi Venkatesh and S. Krishnan 2022. “Assessment of Cellular DNA Damage via Comet Assay on Human Breast Cancer (MCF-7) Cells Exposed to Annonacin and *Annona muricata* L. extracts”. Best Poster Award (1st position) for Poster presentation at International Conference on Natural Science and Green Technologies for Sustainable Development (NTSD-2022) organized by School of Biological Sciences and Biotechnology, Goa University held during 30th November-2nd December 2022.

SCIENTIFIC PUBLICATIONS (National and International):

1. Naik, A. V., & Sellappan, K. (2019). Physicochemical and Phytochemical Analysis of Different Plant Parts of *Annona muricata* L. (Annonaceae). *Pharmaceutical methods*, 10(2).
2. Naik, A. V., & Sellappan, K. (2020). Chromatographic fingerprint of essential oils in plant organs of *Annona muricata* L. (Annonaceae) using HPTLC. *Analytical chemistry letters*, 10(2), 214-226.
3. Naik, A.V., Cardozo, J., Fernandes, R., Khan, A. & Bhandari, R. (2020). Photosynthetic pigments, lipids and phenolic compounds of three green alga isolated from freshwater ecosystem. *Journal of Algal Biomass Utilization*, 11(1), 68-83.
4. Naik, A. V., & Sellappan, K. (2020). Assessment of Genotoxic potential of Annonacin and *Annona muricata* L. extracts on human breast cancer (MCF-7) cells. *Advances in Traditional Medicine*, 1-11.
5. Naik, A. V., & Sellappan, K. (2020). *In vitro* evaluation of *Annona muricata* L. (Soursop) leaf methanol extracts on inhibition of tumorigenicity and metastasis of breast cancer cells. *Biomarkers*, 25(8), 701-710.

6. Naik, A. V., Dessai, S. N., & Sellappan, K. (2021). Antitumour activity of *Annona muricata* L. leaf methanol extracts against Ehrlich Ascites Carcinoma and Dalton's Lymphoma Ascites mediated tumours in Swiss albino mice. *Libyan Journal of Medicine*, 16(1), 1846862.
7. Naik, A. V., & Sellappan, K. (2021). Screening antioxidant activity by in-situ HPTLC-DPPH assay and in-vitro cytotoxic assessment of *Annona muricata* L. plant organ extracts on MCF-7 and SCC-40 cell lines. *Vegetos*, 1-10 (Impact Score: 0.47)
8. Naik, A. V., & Sellappan, K. (2021). Volatile Oil Profiles of Aerial and Underground Plant Parts of *Annona muricata* L. (Annonaceae) Grown in Goa, India. *Journal of Essential Oil Bearing Plants*, 24(4), 683-694.

PATENT:

- Granted 'Australian Innovation Patent' for the invention entitled, 'A method for treating cancer cells using anti-cancer treating plant extract' (Patent no. 2021104280, dated: 4th May 2022).