

DEPARTMENT OF BOTANY

Personal Information

Name: Dr. G. Kranthi Kumar

Designation: Assistant Professor

Department: Botany

Qualification: M.Sc. Ph.D.

Specialization: Botany

Date of Joining the Institution: 05-08-2026

Total Teaching Experience: 4 Years

Official Email ID: jk.kranthi@gmail.com

Contact Number (Optional): 9177238824



Qualification	Specialization	University	Year
Ph.D.	Botany	Acharya Nagarjuna University	2018
M.Sc	Botany	Acharya Nagarjuna University	2008
B.Sc	Botany, Zoology, Chemistry	Acharya Nagarjuna University	2005

Areas of Interest

- Teaching Interests: Cell Biology, Plant physiology & Plant taxonomy
- Research Interests: Plant Microbe interaction
- Emerging Areas of Research: Microbial enzymes

Courses Taught

- Undergraduate Courses: Cell Biology, Microbial Diversity, Plant taxonomy, Plant Physiology, Plant tissue culture
- Value-Added/Certificate Courses: Herbal Medicine & Agricultural Biotechnology

Research Profile

- Number of Research Publications: 30
- Scopus Indexed Publications: 5

- Web of Science Publications: 5
 - UGC-CARE Publications: 6
 - Books Published: 2
 - Book Chapters: 1
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Academic Responsibilities

- Board of Studies Member: J.K.C. college, Guntur
 - Examination Duties: Question paper setter for UG Life Sciences
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Professional Memberships

- **Membership in Professional Bodies:**
 1. Indian science congress Association = life member: L39107
 2. Association of Microbiologists in India= 4903-2019, Life member
 3. Asian Society of Researchers (ASR): R219052101
 4. Scientific and Technical Research Association (STRA): STRA-M19605
 5. International journal of creative research thoughts (Membership = ID: 114854
 6. Teaching and Research Association (TERA): life time
 7. Health care and biological sciences Research association: Membership no: HBSRA –M 19451
 - **Editorial Board Memberships (if any):**
 1. World journal of pharmaceutical Research
 2. International journal of pharmaceutical science and Research
 3. Asian Journal of Agricultural Sciences
 4. International journal of microbiology and biotechnology
 5. American journal of Life Sciences (AJLS) April- 2022 to April-2024.
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Awards and Recognitions

- Academic Awards: Gold Medal in Post Graduation
 - Research Awards: Best Publication Award from *International Journal of Bio-Technology and Research*
 - Other Recognitions: Received certificate of excellence in peer reviewing, Global Press Hub- 28-10-2022. Asian Journal of Research and Review in Agriculture.
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FDPs / Workshops / Conferences

- Faculty Development Programmes Attended: 10
- Workshops/Seminars/Conferences: 20
- **Resource Person/Invited Talks:**
 1. Acted as jury member for AMARAVATHI BALOTSAVAM Science fair- 2019, on August 29th , 30th , & 31st at SRR&CVR COLLEGE, Vijayawada, Andhra Pradesh.
 2. Acted as jury member for Dr. Sudha Science quest 2019-2020, on November 29th at St. Johns E.M. school, Vidyadharapuram, Vijayawada, Andhra Pradesh.
 3. Acted as jury member for Dr. Sudha Science quest 2019-2020, on November 30th at St. Johns E.M. school, Gunadala campus, Vijayawada, Andhra Pradesh.
 4. Acted as jury member for INSPIRE-MANAK 2019-2020 District level exhibition & Project competitions (DLEPC) KRISHNA on 3rd February-2020 at Don Bosco Scholl, Guntupalli, Andhra Pradesh.
 5. Evaluator for state event of 28th NCSC 2020 held at APCOST RSC Complex, VIJAYAWADA, ANDHRA PADESH on 7th &8th January 2021.
 6. Acted as jury member for Dr. Sudha Science quest 2022-2023, on November 29th at St. Johns E.M. school, Gunadala campus, Vijayawada, Andhra Pradesh.

Invited Talks:

1. Delivered an invited talk on **Role of Microbes in Agriculture in National conference plants and Environment (Virtual mode)**. Organized by department of Botany, tribal Welfare Degree college for women, Nizamabad, Telangana. 05-05-2021.

Extension and Outreach Activities

- Community Service: Service -Learning programme
- Environmental Awareness Programmes: Mega Plantation
- Social Outreach Activities: Bio fertilizer distribution to farmers

Research Identifiers

- ORCID ID: <https://orcid.org/0000-0002-6279-6214>
 - Google Scholar Profile: <https://scholar.google.com/citations>
 - Scopus Author ID: 57209912907
 - Web of Science Researcher ID: F-8878-2019
 - Vidwan ID: <https://vidwan.inflibnet.ac.in/profile/89041>
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List of Research Publications (Research Papers / Books / Book Chapters / Patents etc)

1. (2014). Effect of carbon and nitrogen sources on exopolysaccharide production by *rhizobial* isolates from root nodules of *Vigna trilobata*, *African journal of microbiology research*, 8(22): 2255-2260. ISSN: 1996-0808 DOI: 10.5897/AJMR2013.6539
2. (2014). Phosphate Solubilizing *Rhizobia* isolated from *Vigna trilobata*, *American Journal of Microbiological Research*, 2 (3):105-109. ISSN: 2328-4137. DOI: 10.12691/ajmr-2-3-4
3. (2016). Bioproduction of indole 3- acetic acid by *Rhizobium* strains isolated from root nodules of *Vigna Trilobata* cultivars, *International Journal of Bio-Technology and Research*, 6(1):1-12. ISSN: 2249-6858
4. (2016). Plant growth promoting characteristics of *Rhizobial* strains isolated from root nodules of *Vigna trilobata* cultivars. *International journal of Microbiology research*, 8(8):781-784. ISSN: 0975-5276
5. (2016). Characterization of *Agrobacterium tumifaciens* strains isolated from root nodules of *Vigna trilobata* cultivars. *International journal of pharma and biosciences*, 7(4):(B)532-539. ISSN: 0975-6299
6. (2016). Chitinase production by rhizobacterial strains isolated from root nodules of *Vigna trilobata* cultivars. *International Journal of Agricultural Science and Research*, 6(5):85-92. ISSN: 2321-0087
7. (2016). Characterization of *Sinorhizobium* and *Ensifer* species isolated from root nodules of *Vigna trilobata* cultivars. *International journal of Current Research*, 8(11):40917-40922. ISSN: 0975-8337
8. (2017). Plant growth promoting characteristics of non-rhizobial strains isolated from root nodules of *Vigna trilobata* cultivars. *International Journal of Agricultural Science and Research*, 7(2):273-278. ISSN: 2321-0087

9. (2018). Characterization of exopolysaccharide producing *Sinorhizobium kostisense* MRR 104 isolated from root nodules of *Vigna trilobata*. *International journal of pharma and biosciences*, 9(2):160-165. ISSN: 0975-6299 DOI: 10.22376/ijpbs.2018.9.2.b160-165
10. (2018). Preliminary characterization of *Rhizobacterial strains* isolated from legume [*Vigna trilobata* (L.) verdc.] root nodules. *International Journal of Scientific Research in Science and Technology*, 4(7): 279-284. ISSN: 2395-6011.
11. (2018). Screening of amylase producing bacillus sp. isolated from banana rhizosphere. *International journal of pharmacy and pharmaceutical research*, 11(2): 134-142. ISSN: 2349-7203
12. (2018). Plant Growth Promoting Characteristics of *Bacillus Licheniformis* DS3 Isolated From Agriculture Field Soil. *International Journal of Scientific Research in Science and Technology*, 4(2): 1479-1484. ISSN: 2395-6011
13. (2018). Studies on Gibberellic acid production by *Bacillus licheniformis* DS3 isolated from Banana field soils. *International journal of Scientific Research in Science and Technology*, 4(5): 1106-1112. ISSN: 2395-6011
14. (2018). Optimization Studies on Alpha Amylase Production by *Bacillus licheniformis* DS3 and *Bacillus subtilis* DS7 using Submerged Fermentation. *World journal of pharmaceutical research*, 7(8): 1231-1239. ISSN: 2277-7105 DOI: 10.20959/wjpr201817-11818
15. (2018). Effect of different concentrations of metal ions on α -amylase production by *Bacillus licheniformis* DS3. *World journal of pharmaceutical research*, 7(7): 2061-2072. ISSN: 2277-7105 DOI: 10.20959/wjpr201818-11936
16. (2018). Production and Optimization of Alpha Amylases using Banana waste by *Bacillus licheniformis* DS3 under Solid State Fermentation, *International Journal of Research in BioSciences (IJRBS)* 7(3):18-25. ISSN: 2319-2844
17. (2018). Biocontrol activity of Siderophores producing *Bacillus licheniformis* DS3 against several pathogenic fungi in Black gram [*Vigna mungo* (L.) Hepper], *International journal of current research*, 10(7):71590-71594. ISSN: 0975-833X. DOI: 10.24941/ijcr.31092.07.2018
18. (2018), Bioproduction Of Indole 3-Acetic Acid By *Trichoderma* Strains Isolated From Agriculture Field Soils In Senegal, *World journal of pharmaceutical research*, 7(17):817-825. ISSN: 2277-7105. DOI: 10.20959/wjpr201817-13258

19. 2019. Polygalacturonase production by *Aspergillus nomius* MR103 in Solid State Fermentation using Agro- Industrial wastes. (Journal of Applied and natural Sciences, 11 (2): 305-310. ISSN: 2231-5209 DOI: <https://doi.org/10.31018/jans.v11i2.2039>
20. (2019). Studies on Phyto Chemical constituents and antibacterial activity of endemic medicinal plant *Anodendron paniculatum*, *International journal of pharmacy and biological sciences*. ISSN: 2230-7605. Doi No:10.21276/ijpbs.2019.9.3.35
21. (2019). Antioxidant activity and production of secondary metabolites of adult plant and in vitro calli of *Anodendron paniculatum*, (*Journal of Applied and natural Science*; 11 (3): 632-635. ISSN: 2231-5209 DOI: <https://doi.org/10.31018/jans.v11i3.2132>
22. (2019), Protease production by Trichoderma strains isolated from Agriculture Field Soils In Senegal. *Journal of food agriculture & environment vol 17 (3&4 july-october): 75-79*. ISSN: 1459-0255
23. (2020), factors affecting the Chitinase production by Trichoderma strains isolated from Agriculture Field Soils. *Journal of applied biology and biotechnology*, 8 (2): 40-44, ISSN: 2455-7005 DOI: 10.7324/JABB.2020.80207
24. (2020). In-vitro regeneration of endemic medicinal plant *Anodendron paniculatum* from nodal segment explants. *Research journal of Agricultural sciences*, 11(5): 1106-1109. ISSN: 0976-1675
25. (2021). Production of catechol type of siderophores by *bacillus altitudinis* and *paenibacillus* species isolated from root nodules of *vigna trilobata* (L.) Verdc. Cultivars, *Research journal of biotechnology*.16 (6): 64- 67. ISSN: 2278-4535
26. (2022). Hydroxamate type of Siderophore production by rhizobacterial strains isolated from root nodules of *Vigna trilobata*, *Research journal of biotechnology*,17 (9): 107-110. ISSN: 2278-4535 doi.org/10.25303/1709rjbt1070110
27. (2022). Studies on Nodulation Diversity and Leg Haemoglobin Content of *Vigna Trilobata* (L.) Verde. Cultivars from Andhra Pradesh and Telangana States. Open access journal of microbiology and biotechnology 7 (4): 1-4. ISSN: 2576-7771 DOI: 10.23880/oajmb-16000247.
28. (2023). First Report on Amylase Production by *Bacillus pumilus* DS5 Isolated from Agricultural Field Soils. *International journal of pharmaceutical sciences and research*. 14 (5): 2541-2546. 14(5).2541-46. ISSN: 0975-8232 DOI: 10.13040/IJPSR.

29. (2023). Genetic characterization and diversity analysis of heavy metal-resistant rhizobacterial strains isolated from the root nodules of *Vigna trilobata* determined by the RAPD technique. *Environment&Ecology*, 41EE.41(3C):1875-1882. ISSN:0970-0420 DOI: 10.60151/envec/NVUD9012
30. (2023). Scraps to Greens: Urban Leafy Vegetable Cultivation through Kitchen waste Recycling in Penamaluru. *Significances of Bioengineering & Biosciences*. 6 (3): 648-652. ISSN: 2637-8078 DOI: 10.31031/SSB.2023.06.000636

List of Text Books

1. **G. Kranthi kumar** & M.Raghu Ram, Characterization of Rhizobacterial strains from *Vigna trilobata*- (2019). Lambert publication. **ISBN: 978-620-2-05215-3**
2. **G. Kranthi kumar** & D. Silpa: A text Book for PG Entrance (Life Sciences), Divya Lakshmi Publishers, Meerut. 2022. **ISBN: 978-93-91576-80-6**

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