

## BIODATA

Name: **Dr. ANU RAJAN S.**

**Assistant Professor, Department of Agricultural Microbiology, College of Agriculture, Vellayani.**

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### EDUCATION:

Degree	Board/ University	Year	Grade
Ph. D (Agril. Microbiology)	University of Agricultural Sciences, Bangalore	2012	9.30/10.00
M. Sc. (Agril. Microbiology)	Tamil Nadu Agricultural University, Coimbatore	2003	9.60/10.00
B. Sc (Agriculture)	Kerala Agricultural University, Thrissur	2001	9.00/10.00
Pre -degree	University of Kerala, Thiruvananthapuram	1996	84.6 %
SSLC	Board of Public Examinations, Govt. of Kerala	1994	93.3 %

### AWARDS AND FELLOWSHIPS:

- Merit Scholarship awarded by the Kerala Agricultural University during 1996-2001
- Second rank in B. Sc (Agriculture) from the Kerala Agricultural University in 2001
- ICAR –Junior Research Fellow during 2001-2003
- Dr. M. Rangarajan Endowment Prize in Agril. Microbiology during 2001-2003.
- CSIR- Junior Research Fellow in 2003
- CSIR - NET qualified in 2003
- ASRB - NET qualified in 2004

### RESEARCH EXPERIENCE:

Three years leading to Ph.D degree at the University of Agricultural Sciences, Bangalore.

**Thesis title: Microbial endophytes of crop plants and their role in plant growth promotion.**

**TRAININGS ATTENDED:**

Two week online Faculty Development Program on developing online courses for SWAYAM	School of Computer Science and IT and online Program cell, Uttarakhand Open University, Haldwani	21-06-2021 to 05-07-2021
Online foundation course on Research, Education and extension management for newly joined assistant Professors	Director of Extension and CTI	02/08/2021 to 10/08/2021
Online training programme on Data analysis and hands on training in Statistical Methods	Department of Agricultural Statistics, College of Agriculture, Vellayani	02 /09/2021 to 04/09/2021
Online Faculty Induction Programme	UGC-HRDC, Kannur University, Kerala	21-10-2021 to 19-11-2021
Virtual workshop in science communication	ICAR-IIHR	29-12-2021
HRD training on Enhancing the teaching, research & Extension skills of scientist of KAU	TSS, College of Agriculture, Vellayani by KAU, Directorate of Extension	2/12/2022
Workshop on Protect your inventions -road map to patenting	College of Agriculture Vellayani	23-2-2023
Workshop on Greener Cities, Healthier Lives: Urban agriculture unleashed	TSS, Vellayani and French Institute of India &Alliance Francaise De, Trivandrum	18.10.2023
HRD Training for scientists on Balancing Work life and career transition for development	TSS, CoA, Vellayani	12-02-2024
MOOC on Artificial Intelligence in Agriculture	ICAR-NAARM, Hyderabad	01-03-2024 to 31-03-2024
Edorer's Master Class on Disruptive Leaders	Edorer Master Class	18-10-2024
NEP 2020 Orientation & Sensitization Programme	Malaviya Mission Teacher Training Programme (MM-TTP) of University Grants Commission (UGC) Organized by UGC-MMTTC, University of Kerala, Kariavattom, Thiruvananthapuram	04-11-2024 to 14-11-2024.

**CONFERENCES, WORKSHOPS AND SEMINARS ATTENDED:****International:**

1. International Conference on Advances in Plant Health Improvement for Sustainable Agriculture (APHISA 2025), 14-16<sup>th</sup> February, 2025, V.O. Chidambaranar Agricultural

College & Research Institute, Killikulam, Vallanad Post - 628 252. Thoothukudi District (TN). India

2. International Seminar on Spices-KAU 2024 (ISSK 2024) (Spices: Innovative and Green Technologies for Sustainability), June 5-7, 2024, College of Agriculture, Vellayani.
3. International Conference on Advanced Biology – ICAB 2022 organised by Inter University Centre for Evolutionary and Integrative Biology, University of Kerala, Kariavattom, Thiruvananthapuram held from 23rd to 25th February 2022.
4. International Conference on Biotechnology: Trends On Future Prospects (BTFP-2022) organized by the Department of Plant Biotechnology, University Of Agricultural Sciences, Bangalore GKVK, Bengaluru – 560065 from 13-15 September, 2022.
5. International Conference on Climate change, Forest Resource and Environment (ICCFRE-2011) at University of Kerala in 9-11<sup>th</sup> December, 2011.
6. International Seminar on Emerging Threats and Challenges of Biodiversity: Policy framework for Sustainable Management (ETCOB 2012) at Sri Venkateswara University, A. P. in 2-4<sup>th</sup> March, 2012.

**National:**

1. 9<sup>th</sup> Asian PGPR India Chapter National conference on Beneficial microbes for Sustainable Agriculture organised by Asian PGPR Society and Bharathiar University from 29-30<sup>th</sup> July 2024.
2. 8<sup>th</sup> National Asian PGPR conference on Beneficial microbes for integrated plant health management organised by Asian PGPR Society and UAS, Bangalore from 19-21<sup>st</sup> September 2023.
3. Indian Mushroom Conference-2023 Mushroom Diversity and Diversification: Opportunities and Challenges organized by Mushroom Society of India and AICRP on Mushrooms and RARS (SZ), Vellayani from 18<sup>th</sup> to 19<sup>th</sup> August, 2023.
4. National Seminar on Biodiversity of Mushrooms and its Future Prospects as Myconeutraceuticals organized by Regional Agricultural Research Station (SZ), Vellayani on 14<sup>th</sup> March, 2023.
5. Workshop on Protect your inventions- Roadmap to Patenting on 23<sup>rd</sup> February 2023 organised by Department of Plant Breeding and Genetics, College of Agriculture, Vellayani, Thiruvananthapuram.
6. Webinar on National Education Policy2020- Changing roles of teachers on 13<sup>th</sup> October, 2022 organised by UGC-HRDC, Kannur University.
7. Webinar with Taylor and Francis – How to publish in Academic journal on 30<sup>th</sup> September, 2022 organised by Euraxess.
8. One day National Webinar on emerging Techniques in Molecular Biology for crop improvement on 16<sup>th</sup> February 2022 organized by National Academy of Sciences, India and Centre for Plant Biotechnology and Molecular Biology, KAU.
9. 34th Kerala Science Congress on Science, Technology & Innovation for Transition to A Knowledge Economy from 10-12<sup>th</sup> February 2022 organized by Kerala State Council for Science, Technology and Environment, Sasthra Bhavan, Pattom, Thiruvananthapuram.
10. Annual National Conference on Sustainable Ecosystems, Aquaculture, Fisheries and Fisherfolk (ANCOSEAFF, 2022), at Department of Aquatic Biology and Fisheries, Kariavattom campus of University of Kerala, Thiruvananthapuram from 28-29 January, 2022.
11. Virtual workshop on science communication conducted by SS&T, ICAR-IIHR on 29-12-2021.

12. Special Lecture series on Climate Change and its Impact on Agriculture and Food Security conducted at UAS, Bengaluru during 21-23<sup>rd</sup> February, 2011.
13. National Seminar on Application of Microbes in Management of Agriculture and Environment at Sri Krishnadevaraya University, Anantapur, A. P during 4-6<sup>th</sup> March, 2011.
14. 11<sup>th</sup> National Level Biological Congress on Bioscientific Technologies (MCAS BIO 2012) at the Muthyammal College of Arts and Science, Tamil Nadu during 6-7<sup>th</sup> January, 2012.

#### **PROFESSIONAL MEMBERSHIPS:**

- Member of the National Environmentalists Association
- Annual member of the Mysore Journal of Agricultural Sciences

**PERSONAL INFO:** Female, Indian, Married, Born 16<sup>th</sup> February, 1978

#### **LIST OF PUBLICATIONS**

##### **Book Chapters**

1. Gomathy M., Sabarinathan K.G, Rajakumar D., Manoj M., Bhimani, H. D., Priya John, Tharanee Vijayaratne. Sagarika Ekanayake., Uma Maheswari., Anu S., Rajan, Dilip Saikia, Dilip Tamang, Simana Bora, Theradimani M. and Ramya M. 2023. Fermented foods of South Asia. *In* Hurst, C.J.(ed). Microbial Fermentations in nature and as Designed Processes. p. 323.
2. A.B. Anju, K. N. Anith, N. Chitra, S. Anu Rajan and V. I. Soumya. 2022. Endospore forming *Bacillus* spp. as growth promoter in black pepper cuttings. *In* Prof. Suhara Beevy S., Dr. Mariamma Cherian, Dr. Darsan B. Menon, Dr. Anil Kumar T. R., Dr. Mini V.S.(Eds). Trends in Advanced Biology. Published by University of Kerala, Kariavattom, Thiruvananthapuram. p.1-6. ISBN 978-81-956634-0-8
3. N. Sruthi Suresh, N. Chitra, S. Anu Rajan, V. I. Soumya and K. N. Anith. 2022. Diversity of exopolysaccharide producing bacteria from soil based insect nesting structures. *In* Prof. Suhara Beevy S., Dr. Mariamma Cherian, Dr. Darsan B. Menon, Dr. Anil Kumar T. R., Dr. Mini V.S. (Eds). Trends in Advanced Biology. Published by University of Kerala, Kariavattom, Thiruvananthapuram. p.175-182. ISBN 978-81-956634-0-8
4. Chitra N., Bindhu R. Raj, Subha P., Anu Rajan S., Soumya V.I., Anith K.N. and Mohanty S.R. 2022. *In* Plant growth promoting potential of nitrogen fixing bacteria from Attappady Hill tract of Kerala. Prof. Suhara Beevy S., Dr. Mariamma Cherian, Dr. Darsan B. Menon, Dr. Anil Kumar T. R., Dr. Mini V.S. (Eds). Trends in Advanced Biology. Published by University of Kerala, Kariavattom, Thiruvananthapuram. p.407. ISBN 978-81-956634-0-8

##### **Papers in refereed journals:**

Scaria, Thanku Mariam, V.I. Soumya, N. Chitra, Gowri Priya, S. Anu Rajan, Nayana Grace Koshy, and K. N. Anith. 2025. Soil Microbiome Modulation Mediated by Fermented Organic Preparations. *Journal of Advances in Microbiology* 25 (5):122-35. <https://doi.org/10.9734/jamb/2025/v25i5939>.

- Nayana Grace Koshy, S. Anu Rajan, K. N. Anith, Chitra N, Soumya V. I and R. Beena. 2025. Beyond the pink: uncovering the secrets of pink pigmented facultative methylotrophs. *Archives of Microbiology*, 207:80 <https://doi.org/10.1007/s00203-025-04280-9>.
- Neha Anil, Sherin A. Salam, G. Heera, S. Asha, S. Anu Rajan and N.V. Radhakrishnan. 2025. Pioneering Plant Health: Biosensors for Early and Advanced Pathogen Detection. *Journal of Advances in Biology & Biotechnology*. 28(2): 951-962. Article no. JABB.132087 ISSN: 2394-1081.
- Yarlagadda ManjuBhargavi, **S Anu Rajan**, N Chitra, VI Soumya, R Beena & KN Anith. 2024. Pink pigmented facultative methylotrophs (PPFMs) improve rooting in black pepper (*Piper nigrum* L.) cuttings and mitigate drought stress. *Plant Science Today*. 2024; 11(sp3): 43-53. <https://doi.org/10.14719/pst.4546>
- Sreechithra M.S., Sherin A. Salam, Krishnapriya P.J., **Anu Rajan S.**, Heera G. 2024. AMF-mediated defense responses in crop plants against phytopathogenic fungi. *J. Plant Dev. Sci.* 16 (1), 1-7.
- Aiswarya B. Nair, S. Anu Rajan, N. Chitra, V.I. Soumya, K.N. Anith and R.S. Rachanamol. 2024. Abiotic stress tolerant Pink Pigmented Facultative Methylotrophs (PPFMS) promote plant growth. *Biological Forum – An International Journal* 16(6): 58-63.
- Nysanth, N. S., **S. Anu Rajan**, S. L. Sivapriya, and K. N. Anith. 2023. Pink Pigmented Facultative Methylotrophs (PPFMs): Potential Bioinoculants for Sustainable Crop Production. *Journal of Pure & Applied Microbiology*. 17, no. 2. <https://doi.org/10.22207/JPAM.17.2.17>
- Anju, A. B., Chitra Natarajan, R. Preetha, **S. Anu Rajan**, V. I. Soumya, and K. N. Anith. 2023. Bacterization with Endospore-forming *Bacillus* spp. Promotes Plant Growth and Suppresses Foot Rot Disease in Black Pepper (*Piper nigrum* L.) in the Nursery. *Journal of Pure & Applied Microbiology*. 17, no. 2.
- S Anu Rajan**, K Prathibha, K Aravind and D Radhakrishna. 2013. Endophytic bacteria as biocontrol agents against phytopathogens of vegetable crops. *The Ecoscan*, **7**: 9-12.
- Anu Rajan S** and Radhakrishna D. 2013. Effect of endophytic bacteria on the rooting and establishment of cuttings of *Hibiscus rosasinensis*. *IOSR Journal of Agriculture and Veterinary Science (IOSR- JAVS)* **3**: 17-22 e ISSN: 2319-2380, p-ISSN- 2319-2372.
- Anu Rajan, S.**, Sivasankari Devi, T., Maina, C.C., Prathibha, K. and Sundaram, S. P. 2012. Methylotroph- A novel bioinoculant for sustainable agriculture. *The Bioscan*, **6**:141-144.
- S. Anu Rajan**, T. K. Radha, Y. H. Prabhuswamy, M. Raghavendrakumar and G. P. Brahmaprakash. 2008. Population of beneficial microorganisms in the rhizosphere of selected biofuel plants. *J. Soil Biol.Ecol.* **28**: 177-180.

T Sivasankari Devi, **S Anu Rajan**, CC Maina and VC Suvarna. (2013) Antimicrobial activity of some important leaf extracts. *Insight Microbiology* DOI: 10.5567IMICRO-IK.2013.15.18

**Abstracts published in conferences/ seminars/newsletters:**

1. Meenakshi B. Presannan, Anu Rajan S., Chitra N, Soumya V I and Anith K N. 2025. Exploring the plant growth promoting potential of pink pigmented facultative methylotrophs from vegetable crops. E Proceedings of the WUACD International Conference on One Health: Equitable and holistic approach for sustainable balance and optimization of health and ecosystem organized by Avinashilingam Institute for HomeScience and Higher Education for Women, Coimbatore from February 5-7, 2025.
2. Ameera Vappukannu Ashraf, N. Chitra, K.N..Anith, S. Anu Rajan, V.I.Soumya, K.P. Sindura and K.B.Soni. 2025. Exploring the potential of exopolysaccharide producing bacteria for climate resilient agriculture. Compendium of Abstracts of 3<sup>rd</sup> International Conference on Empowering Agriculture for Sustainable Development: SDG Targets for Food and Environmental Stability, (ICEA 2025) organized by Mother Teresa College of Agriculture, Mettusalai, Illuppur & All-India Agricultural Students Association (AIASA) on 22.01.2025 at MTCA, Pudukottai.
3. Thanku Mariam Scaria, V.I. Soumya, N. Chitra, Gowri Priya, Nayana Grace Koshy, S. Anu Rajan and K.N. Anith. 2024. Bioprospecting of fish amino acid for bacteria with plant growth promotion and antagonistic activity against phytopathogens. Seminar Compendium of ISMPP Zonal Meet (South Zone) and National Seminar on “Advances in Plant Pathology: Challenges and Prospects” organized by Indian Society of Mycology and Plant Pathology (Southern Zone), ICAR- Central Tuber Crops Research Institute, Thiruvananthapuram Kerala Agricultural University, Vellanikkara, Thrissur on 14 December, 2024 at CTCRI, Thiruvanthapuram, Kerala. P.29.
4. Jinisha Blessie J. P, Chitra N, Anu Rajan S, Soumya V I and Anith K N. 2024. Exopolysaccharide producing bacteria for sustainable chili cultivation: growth enhancement and biocontrol of *Colletotrichum capsica*. Seminar Compendium of ISMPP Zonal Meet (South Zone) and National Seminar on “Advances in Plant Pathology: Challenges and Prospects” organized by Indian Society of Mycology and Plant Pathology (Southern Zone), ICAR- Central Tuber Crops Research Institute, Thiruvananthapuram Kerala Agricultural University, Vellanikkara, Thrissur on 14 December, 2024 at CTCRI, Thiruvanthapuram, Kerala. p.31-32.
5. G. Aswani, S. Anu Rajan\*, N. Chitra, K.N.Anith and V.I. Soumya. 2024. Ecological and Agricultural Significance of Pink Pigmented Facultative Methylotrophs: A Comprehensive Overview. Seminar Compendium of ISMPP Zonal Meet (South Zone) and National Seminar on “Advances in Plant Pathology: Challenges and Prospects” organized by Indian Society of Mycology and Plant Pathology (Southern Zone), ICAR- Central Tuber Crops Research Institute, Thiruvananthapuram Kerala Agricultural University, Vellanikkara, Thrissur on 14 December, 2024 at CTCRI, Thiruvanthapuram, Kerala. p.33.

6. Sreechithra M. S., Sherin A. Salam ., Anu Rajan S. , Heera G ., Neha Anil and Radhakrishnan N. V. 2024. Exploring the plant growth promoting potential of rhizobacterial antagonists in cowpea cultivation. Seminar Compendium of ISMPP Zonal Meet (South Zone) and National Seminar on “Advances in Plant Pathology: Challenges and Prospects” organized by Indian Society of Mycology and Plant Pathology (Southern Zone), ICAR-Central Tuber Crops Research Institute, Thiruvananthapuram Kerala Agricultural University, Vellanikkara, Thrissur on 14 December, 2024 at CTCRI, Thiruvanthapuram, Kerala. p.34.
7. Meenakshi B Presannen, S. Anu Rajan, N. Chitra\*, V. I. Soumya and K.N. Anith. 2024. Exploring the biocontrol potential of cyanobacteria: A Sustainable approach for agricultural enhancement. Seminar Compendium of ISMPP Zonal Meet (South Zone) and National Seminar on “Advances in Plant Pathology: Challenges and Prospects” organized by Indian Society of Mycology and Plant Pathology (Southern Zone), ICAR- Central Tuber Crops Research Institute, Thiruvananthapuram Kerala Agricultural University, Vellanikkara, Thrissur on 14 December, 2024 at CTCRI, Thiruvanthapuram, Kerala. p.34.
8. S. Aswathy, N. Chitra, S. Anu Rajan, V.I. Soumya and K.N. Anith. 2024. Enhancing Sustainable Agriculture: The Role of Biofilm-Forming Plant Growth Promoting Rhizobacteria in Soil Health and Plant Resilience. Seminar Compendium of ISMPP Zonal Meet (South Zone) and National Seminar on “Advances in Plant Pathology: Challenges and Prospects” organized by Indian Society of Mycology and Plant Pathology (Southern Zone), ICAR- Central Tuber Crops Research Institute, Thiruvananthapuram Kerala Agricultural University, Vellanikkara, Thrissur on 14 December, 2024 at CTCRI, Thiruvanthapuram, Kerala. p.35.
9. Nayana Grace Koshy, S. Anu Rajan, V.I. Soumya, N. Chitra, K.N. Anith, Thanku Mariam Scaria and R. Beena. 2024. PPFMs isolated from bird's eye chilli as potential biocontrol agents for management of fruit rot of chilli. Seminar Compendium of ISMPP Zonal Meet (South Zone) and National Seminar on “Advances in Plant Pathology: Challenges and Prospects” organized by Indian Society of Mycology and Plant Pathology (Southern Zone), ICAR- Central Tuber Crops Research Institute, Thiruvananthapuram Kerala Agricultural University, Vellanikkara, Thrissur on 14 December, 2024 at CTCRI, Thiruvanthapuram, Kerala. p.35-36.
10. Nayana Grace Koshy, S Anu Rajan, V.I. Soumya, N. Chitra and K.N. Anith. 2024. Plant growth promoting pink pigmented facultative methylotrophs from chilli suppress *Colletotrichum capsici*. In: P. Ponmurugan, A. Anitha, M.S. Reddy. (eds) Beneficial microbes for sustainable agriculture. Published by Excel India Publications, New Delhi. 978-93-89947-36-6 (Paperback) p 636. 9<sup>th</sup> Asian PGPR Indian Chapter National Conference Proceedings organized by Department of Botany, Bharathiar University, Coimbatore, TN from 29-30<sup>th</sup> July, 2024
11. Thanku Mariam Scaria, V.I. Soumya, N. Chitra, Gowripriya, S. Anu Rajan and K.N. Anith. 2024. Antagonistic microorganisms from fermented organic manures for the management of phytopathogens. In: P. Ponmurugan, A. Anitha, M.S. Reddy. (eds) Beneficial microbes for

sustainable agriculture. Published by Excel India Publications, New Delhi. 978-93-89947-36-6 (Paperback) p 636. 9<sup>th</sup> Asian PGPR Indian Chapter National Conference Proceedings organized by Department of Botany, Bharathiar University, Coimbatore, TN from 29-30<sup>th</sup> July, 2024

12. Megha M., Anu Rajan S., Soumya V. I., Chitra N. and Anith K. N. 2024. Pink Pigmented Facultative Methyloproths from vegetables produce plant growth promoters *in vitro*. In: (eds) Abdul Haris A, Regi Jacob Thomas, Jeena Mathew, Nihad K and Indhuja S. 2024. Book of Abstracts. National Seminar on Climate Smart Agriculture for Sustainable Soil and Plant Health in Plantation Crops (NSCSAPC-2024). ICAR-Central Plantation Crops Research Institute, Reg. Station, Kayamkulam. from 13-14 June 2024, published by Dr. K. B. Hebbar Director ICAR-Central Plantation Crops Research Institute Kudlu P.O-Kasargod p.68.
13. Yarlagaadda Manju Bhargavi, S. Anu Rajan, V.I. Soumya, K.N.Anith, N. Chitra and R. Beena. 2024. Pink pigmented facultative methyloproths promote plant growth and mitigate drought stress in black pepper (*Piper nigrum* L.) plantlets. Book of Abstracts, International Seminar on Spices-KAU 2024 (ISSK 2024) (Spices: Innovative and Green Technologies for Sustainability), June 5-7, 2024, College of Agriculture, Vellayani. p.59.
14. S. Aswini, S. Anu Rajan, S. Mekha Hari, B. S. Aiswarya and S. S. Viknesh. 2024. Pretreatment of green gram with natural sources of beneficial bacteria enhances the bacterial load in sprout. In: SP. Ramanathan, A. Ramachandran, B. Ramya, K. Manobharathi, (eds) Abstract Compendium of 2nd International Conference (ICMTCA 2024), May 21, 2024 organised by Mother Teresa College of Agriculture, Pudukkottai, Tamil Nadu. p. 29. ISBN: 978 - 81- 959414 - 6- 9 Published by Jagua Publication, Prayagraj, India.
15. Fathima Fida, K. Amulya Menon, U. Ananthu Krishnan, M. R. Midhun and S. Anu Rajan. 2024. Effect of washing methods on the microbial populations in fresh coriander leaves. Abstract Compendium of 2nd International Conference (ICMTCA 2024), May 21, 2024 organised by Mother Teresa College of Agriculture, Pudukkottai, Tamil Nadu. p. 126.
16. G. Swetha, S. Arya, M. J. Meenakshi, Archa Lekshmi Raj and S. Anu Rajan. 2024. Microgreen biofortification with infused probiotic - a novel approach for improved sprouting. Abstract Compendium of 2nd International Conference (ICMTCA 2024), May 21, 2024 organised by Mother Teresa College of Agriculture, Pudukkottai, Tamil Nadu. p. 127.
17. Jasna Sherin P. T, S. Anu Rajan, V. I. Soumya, N. Chitra and K. N. Anith. 2024. Pink Pigmented Facultative Methyloproths (PPFMs) from chilli (*Capsicum frutescens*) produce plant growth promoters *in vitro*. Abstract Compendium of 2nd International Conference (ICMTCA 2024), May 21, 2024 organised by Mother Teresa College of Agriculture, Pudukkottai, Tamil Nadu. p. 127.
18. Y. Manju Bhargavi., S. **Anu Rajan**, N. Chitra, V.I. Soumya and K. N. Anith. 2023. Plant growth promoting Pink Pigmented Facultative Methyloproths (PPFMs) for climate smart crop production. *Proceedings of the 8<sup>th</sup> Asian PGPR conference on Beneficial Microbes for*

*Integrated plant health Management* 19-21<sup>st</sup> September 2023 organised by Asian PGPR Society and UAS, Bangalore. p 33.

19. Sangeetha Lakshmi B., Chitra N., **Anu Rajan S.**, Soumya V. I. Sheena A., and K. N. Anith. 2023. Enhancing rooting and hardening of West Indian Cherry using air-layering medium fortified with root-colonizing fungi. *Proceedings of the 8<sup>th</sup> Asian PGPR conference on Beneficial Microbes for Integrated plant health Management* 19-21<sup>st</sup> September 2023 organised by Asian PGPR Society and UAS, Bangalore. p 90.
20. M. Gayathri, N. Chitra, K. N. Anith, **S. Anu Rajan**, V. I. Soumya and M. A. Nishan. 2023. Growth-Promoting Prospects of Ragi Rhizobacteria Isolated from Attappady Hill Tract of Kerala. *Proceedings of the 8<sup>th</sup> Agricultural Graduate Students Conference (AGSC) 2023 "Globalization of Agriculture: Food, Feed & Fuel"* held at the School of Post Graduate Studies, Tamil Nadu Agricultural University, Coimbatore on August 22 & 23, 2023, TNAU Publications, Coimbatore – 641 003, India p.91.
15. Anu Rajan S., Heera G., Chitra, V.I. Soumya and K. N. Anith. 2023. Population dynamics of bacteria associated with paddy straw substrate during the cultivation of *Plwurotus* spp. Abstracts of the Indian Mushroom Conference 2023 held at KAU, RARS(SZ), Vellayani Thiruvananthapuram organized by Mushroom Society of India and AICRP on Mushrooms and RARS (SZ), Vellayani from 18<sup>th</sup> to 19<sup>th</sup> August, 2023 p.43.
21. Y. Manju Bhargavi, **S. Anu Rajan**, N. Chitra, V. I. Soumya and K. N. Anith. 2023. Diversity of Pink Pigmented Facultative Methyloprophs (PPFMs) with water stress tolerance potential isolated from black pepper (*Piper nigrum* L.). *Abstracts of the International Conference on Recent Advances in Biological Sciences, 2023 (ICRB 2023)* 17-19<sup>th</sup> January 2023 organized by Inter University Centre for Evolutionary and Integrative Biology (ICiEB), University of Kerala. p. 58.
22. Mohammed Fasif Khan, Anith K.N., Chitra N., **Anu Rajan S.** and Soumya V. I. 2023. Plant growth promotion and antagonistic properties of harithakashayam, a fermented liquid organic manure. *Abstracts of the International Conference on Recent Advances in Biological Sciences, 2023 (ICRB 2023)* 17-19<sup>th</sup> January, 2023 organized by Inter University Centre for Evolutionary and Integrative Biology (ICiEB), University of Kerala. p. 93.
23. Gayathri M., Chitra N., Anith K. N., Anu Rajan S., and Soumya V. I. 2022. Plant growth promoting potential of ragi rhizobacteria isolated from Attappady hill tract. *Abstracts of 34<sup>th</sup> Kerala Science Congress on Science, Technology & Innovation for Transition to A Knowledge Economy* organized by Kerala State Council for Science, Technology and Environment Sasthra Bhavan, Pattom, Thiruvananthapuram p. 64.
24. Anu Rajan S. and Radhakrishna D. 2022. Bacterial endophytes for hardening and establishment of tissue culture banana. *Abstracts of 34<sup>th</sup> Kerala Science Congress on Science, Technology & Innovation for Transition to A Knowledge Economy* organized by Kerala State Council for Science, Technology and Environment, Sasthra Bhavan, Pattom, Thiruvananthapuram from 10- 12<sup>th</sup> February 2022 Thiruvananthapuram p.74.
25. N. Chitra, **S. Anu Rajan**, V.I. Soumya, K.N. Anith and S.R. Mohanty. 2022. Microbial inoculant technology for improving livelihood security of tribal population of Attapady hill

- tracts of Kerala. *Souvenir and Book of Abstracts, National Conference on Tribal Horticulture*, 17-18<sup>th</sup> October 2022 organized by Dr.YSR Horticultural University, Venkataramannagudem, West Godavari District-534101, Andhra Pradesh. p.40
26. Shilpa Murali B., Soumya V.I., Chitra N., **Anu Rajan S.**, And Anith K.N. 2022. Epiphytic and endophytic survival of two *Pseudomonas fluorescens* isolates in tomato. *Compendium of Abstracts of the International Conference on Biotechnology: Trends On Future Prospects (BTFFP-2022)* 13-15 September, 2022 organized by the Department of Plant Biotechnology, University Of Agricultural Sciences, Bangalore GKVK, Bengaluru – 560065 p.249.
27. Aiswarya B. Nair., **S. Anu Rajan**, N. Chitra, V.I. Soumya and K.N. Anith. 2022. *In vitro* screening of plant growth promoting pink pigmented facultative methylotrophs (PPFMs) for abiotic stress tolerance. *Compendium of Abstracts of the International Conference on Biotechnology: Trends on Future Prospects (BTFFP-2022)* 13-15 September, 2022 organized by the Department of Plant Biotechnology, University Of Agricultural Sciences, Bangalore GKVK, Bengaluru – 560065 p. 268.
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2. **Anu Rajan, S.** Vishamillatha pachakkarikal. (Vegetables without poison), 29<sup>th</sup> Nov, 2011, Janayugam Daily.
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5. **Anu Rajan, S.** Pachakkarikal: Krishiyum Vipananavum (Vegetables: Cultivation and Marketing). Oct –Nov, 2011, Krishi Anganam published by Vegetable and Fruit Promotion Council of Kerala.

#### **Student Guidance**

M.Sc Within KAU: 2 Completed: 2 Ongoing: 2 M.Sc Outside KAU : 3

Ph.D Ongoing: 1

**Other responsibilities:**

**Projects handled:**

1. Principal Investigator for the Annual State Plan - "Centre of Excellence in Microbial Technology" at College of Agriculture, Vellayani funded by Kerala State Planning Board from 08.03.2025.
2. Principal Investigator for the Annual State Plan Project on Network project on "Development of a bioformulation of Plant growth promoting pink pigmented Facultative Methylophs (PPFMs) for drought mitigation in major vegetable crops of Kerala funded by Kerala State Planning Board from 2022.
3. Co-Principal Investigator for the State Plan Network project on the conservation and utilization of native cyanobacteria from Kerala from 2022 funded by Kerala State Planning Board.
4. Annual State Plan Multidisciplinary and Multi institutional Network Project on identification of drought tolerant landraces of Black Pepper and screening for drought tolerance from 2022 funded by Kerala State Planning Board.
5. Co - Principal Investigator for the Valorisation of biodegradable waste for sustainability and circular economy with a low carbon foot print using black soldier fly from 11.03.2025 funded by Kerala State Planning Board.