# Dr. Sarada S.

Assistant Professor and Head, Department of Vegetable Science, College of Agriculture, Vellayani

#### Address:

"Gokulam", Thevarathu Koikkal Colony, Fort P.O., Thiruvananthapuram, Kerala, PIN-695 023, India

**Phone:** 

+91 9495974675

**Email:** 

sarada.s@kau.in saradarajamony@gmail.com

### **Summary**

My research interest in vegetable crops started with my collaboration with the project entitled 'Network project on Vegetable Development' at the Department of Vegetable Science, under which various sub- projects aimed at the development of high yielding varieties and hybrids of tropical vegetable crops such as yard long bean, amaranthus, winged bean, cluster bean, tomato, chilli *etc.* were included. The conduct of comparative yield trials, farm trials etc. led to the development of four high yielding varieties from the Department of Vegetable Science. I am proud to state that I am the Principal breeder of cluster bean variety KAU Suruchi and associate breeder of yard long bean variety KAU Deepika, amaranthus variety KAU Vaika and winged bean variety KAU Nithya, approved and released by the State Seed Sub Committee held at SAMETI, Anayara during December 2019. Certificate of appreciation was received for the release of the crop varieties of KAU from The Honourable Minister for Agriculture Development and Farmer's Welfare at KAU Central Auditorium, Vellanikkara during January 2021. My current research work is focussed mainly on the development of hybrids with high yield and resistance to biotic stresses, which hamper the cultivation of major tropical vegetable crops such as yard long bean, bitter gourd, chilli, tomato *etc.* in Kerala state.

# **Research Highlights**

- Principal breeder of cluster bean variety KAU Suruchi and Associate breeder of Yard long bean variety KAU Deepika, Amaranthus variety KAU Vaika and winged bean variety KAU Nithya, from the Dept. of Vegetable Science, CoA, Vellayani
- Developed chilli crosses with high yield, quality and leaf curl virus resistance
- Developed tomato crosses with high yield and bacterial wilt resistance
- Developed a superior cross of yard long bean with high yield and field tolerance to anthracnose disease

# **Experience**

- ➤ Junior Research Fellow in a Bhabha Atomic Research Centre (BARC) funded project entitled 'In vitro mutagenesis in orchids' at Kerala Agricultural University from August 2003 to September 2006
- Project Fellow (Agriculture) in Kerala State Land Use Board from October 2006 to March 2008.
- Senior Research fellow in RSVY funded project in Cropping Systems Research Centre, Karamana under Kerala Agricultural University from March 2008 to January 2010.

- Farm Officer in Kerala Agricultural University for one year (2010)
- ➤ Joined Kerala Agricultural University as Assistant Professor (Horticulture) on 5-3-2011

### **Education**

- Graduated in Agricultural Science from Kerala Agricultural University (1996)
- Post Graduation in Horticulture from Kerala Agricultural University (2000)
- Ph.D in Horticulture from Kerala Agricultural University (2005)

# **Area of Specialization**

Vegetable crop production and seed production, Crop improvement and breeding, Protected cultivation

### **Awards & Recognitions**

- ➢ Principal breeder of cluster bean variety KAU Suruchi and Associate breeder of Yard long bean variety KAU Deepika, Amaranthus variety KAU Vaika and winged bean variety KAU Nithya, from the Dept. of Vegetable Science, CoA, Vellayani approved and released by The 28th State Seed Sub Committee held at SAMETI, Anayara on 10-12-2019.
- ➤ Release of crop varieties of KAU was done by The Honourable Minister for Agriculture Development and Farmer's welfare at KAU Central Auditorium, Vellanikkara on 25-01-2021. Certificate of appreciation was received by Dr. S. Sarada, Asst. Professor and Head, for the release of four vegetable varieties from the Dept. of Vegetable Science, CoA, Vellayani.
- Fellow of Hind Agri-Horticultural Society since December 2013.
- ➤ Merin Elza George, PhD. Scholar, Dep. of Vegetable Science received second prize for poster presentation for the topic "Vegetable the carrier of Immunization: Edible Vaccine" in the National e-conference on "Oppurtunities and Challenges: Arid Horticulture" authored by Merin, E.G., Jiji, A. and Sarada, S. organized by School of Agriculture, Suresh Gyan Vihar University, Jagatpura, Jaipur held on 21-10-2020& 22-10-2020.IARI Junior fellowship for doing M. Sc in Microbiology
- ➤ Greeshma U., M.Sc. student received first prize for poster presentation for the topic "Wicking bed irrigation: a water-smart technique for home gardens" in the International seminar on "Sustainable Urban Agricultural Systems and Community Resilient cities" authored by Greeshma, U., Bindhu, J. S., Shalini, P.P., Jacob, D. and **Sarada, S.** organized by Training Service Scheme, College of Agriculture, Vellayani held on 22-03-2022.
- ➤ Syama S. Thampi, PhD. Scholar, Dep. of Vegetable Science received second prize in oral presentation on "Screening of bittergourd genotypes for resistance to downy mildew through artificial inoculation" authored by Syama, S. Thampi and **Sarada**, **S.** in the National Conference on "Horti Phyto Path" held virtually on 11-12 May 2022, organized by Plant Protection Advisory Cell (PPAC), Dr. YSR Horticultural University, West Godavari district, Andhra Pradesh.
- Airina, C.K, PhD. Scholar, Dep. of Vegetable Science received Best poster presentation award for the topic "Heterosis for yield and mosaic resistance in vegetable cowpea (Vigna unguiculata subsp. sesquipedalis (L.) Verdcourt" authored by Airina, C.K and Sarada, S. in the International Conference on "Innovative and Current Advances in Agriculture and allied Sciences" 10-16 July 2023, Society for Scientific Development in Agriculture and Technology, Meerut, U.P., India.

# **Research Projects**

### **Ongoing**

Network project on "Development of AEU based PoP recommendation for major crops of Kerala"- Annual State Plan project 2022-'23- PI

#### **Completed**

- 1. Breeding yard long bean (*Vigna unguiculata* subsp. *sesquipedalis* (L.) Verdcourt for yield and anthracnose resistance funded by Planning Board, Government of Kerala-PI
- 2. 'Network project on vegetable development'- Annual State Plan project 2014- 2016- Co- PI
- 3. Breeding vegetable crops for yield and resistance to biotic and abiotic stress- Co PI
- 4. Network project on "Development of hybrid vegetables and Hi-Tech production technologies"- Annual State Plan project (2016-2018)- Co PI
- 5. Evaluation of superior culture for yield and yellow vein mosaic resistance in okra (*Abelmoschus esculentus* (L.) Moench (2018-2019)- Annual State Plan project 2018-'19- Co PI
- 6. Development and evaluation of anthurium hybrids (2018-2019)- Annual State Plan project 2018-'19
- 7. Standardization of agro-techniques for protected cultivation of leafy vegetables- Annual State Plan project 2018-'19- Co PI
- 8. Standardization of grafting techniques and mass production of grafts in solanaceous and cucurbitaceous vegetables for biotic and abiotic stress resistance- Co PI
- 9. Network project on Breeding vegetable crops for yield and resistance to diseases- Co PI
- 10. Standardization of agro techniques for protected cultivation of leafy vegetables- Co PI

#### **Publications**

#### **Journal Articles**

- 1. Arun Jose, Sarada S. and Radhika N.S. 2023. Performance of tomato (*Solanum lycopersicum* L.) grafts for yield and bacterial wilt resistance. *Environment and Ecology* 41(4): 2297-2302
- 2. Airina, C.K. and Sarada, S. 2023. Heterosis for yield and resistance to mosaic disease in vegetable cowpea (*Vigna unguiculata* subsp. *sesquipedalis* (L.) Verdcourt.). *The Pharma Innoation J.* 12(10): 1536- 1540
- 3. Aruna, S., Rafeekher, M., Johnson, J.M., Sarada, S., Beena, R., Soni, K.B. and Ajin, S.A. 2023. *Piriformospora indica* improves drought tolerance in tomato plants through enhanced nutrient uptake and antioxidant enzymes. *Intnl. J. Plant Soil Sci.* 35(18): 865-875
- 4. Farha, M.K., Gladis, R., Rani, B., Aparna, B., Sarada, S. and Biju Joseph. 2023. Carbon and zeolite based slow release fertilizer formulations enhances nutrient use efficiency and yield in chilli. *Intnl. J. Plant Soil Sci.* 35(14): 115-124
- 5. Ninitha, V., Swapna Alex, Soni, K.B., Sindhura, K.P. and **Sarada, S.** 2023. Induction of embryogenesis in anthers of *Capsicum annuum* var. Arka Meghana. 2023. *Mysore J. Agric. Sci.* 57(1): 186-196
- 6. Thasni, A., **Sarada, S.** and Swapna, A. 2022. *In vitro* bud proliferation response in ivy gourd (*Coccinia grandis* (L.) cv. Sulabha nodal explants with cytokinin levels. *J. Trop. Agric.* 60(2): 222-226
- 7. Merin, E.G., **Sarada, S.** and Joy, M. 2022. Screening of yard long bean (*Vigna unguiculata* subsp. *sesquipedalis* (L.) Verdcourt. Genotypes for resistance to *Colletotrichum gloeosporoides*. 2022. *J. Hortl. Sci.* 17(2): 293-297
- 8. Merin, E.G. and Sarada, S. 2022. Correlations and path analysis of yield components in yard long bean. *Intnl. J. Pharmaceutical Res. Applications* 7(5): 458-469

- 9. Gowda, P.P., Rafeekher, M. and **Sarada, S.** 2022. Performance of parthenocarpic and non-parthenocarpic grafts of cucumber. 2022. *J. Hortl. Sci.* 17(1): 118-123
- 10. Feba, V., **Sarada, S.** and Beena Thomas. 2022. Comparative performance of yard long bean (*Vigna unguiculata* subsp. *sesquipedalis* (L.) Verdcourt) crosses for vegetative and yield characters under open field and rainshelter. 2022. *Environment and Ecology* 40(3C): 1624-1629
- 11. Feba, V., **Sarada, S.** and Beena Thomas. 2022. Correlation studies in yard long bean (*Vigna unguiculata* subsp. *sesquipedalis* (L.) Verdcourt) crosses under open field and rainshelter. 2022. *Annals of Plant and Soil Research* 24(4): 651-655
- 12. Merin, E.G. and **Sarada, S.** 2022. Genetic variability, heritability and genetic advance for yield and yield traits in yard long bean (*Vigna unguiculata* subsp. *sesquipedalis* (L.) Verdcourt. 2022. *International Journal of Agriculture Sciences* 14(5): 11333-11335
- 13. Beena, T., Revathi, B.S., **Sarada, S.** and Adheena, R.A. 2022. Genetic variability parameters of commercially superior *Anthurium andreanum* varieties and hybrids. 2022. *The Pharma Innovation J.* 11(5): 1988-1991
- 14. Arunima, A.S., Manju, R.V., Viji, M.M., Roy, S., **Sarada, S.** and Beena, R. 2022. Impact of nutrients and biofertilizers on flowering in tomato under elevated CO2 induced high temperature condition. 2022. *Journal of Crop and Weed 18(1): 45-49*
- 15. Nair, D.S., Sajeena, A., Joy, M., Jacob, J. and **Sarada, S.** 2021. Ecofriendly management of a new leaf blight disease caused by *Diaporthe* sp. in polyhouse grown yard long bean (*Vigna unguiculata* subsp. *sesquipedalis*). 2021. *J. Mycol. Pl. Pathol.* 51(2):153-168
- 16. Yogananda, M., Rafeekher, M., **Sarada, S.** and Shruthy, O.N. 2021. Yield and quality performance of bottle gourd [*Lagenaria siceraria* (Mol,) Standl.] genotypes in humid tropical lowland of Kerala. 2021. *Annals of Plant and Soil Research* 23(3): 314-318
- 17. Nair, D.S., Sajeena, A., Joy, M., Deepu, M., Jacob, J. and **Sarada, S.** 2021. First report of leaf blight of yard long bean caused by *Diaporthe tectonae* in India. 2021. *Journal of Plant Pathology* 103: 1069-1070
- 18. Vijayakumar, A., Shaji, S., Beena, R., **Sarada, S.**, Sajitha Rani, T., Roy Stephen, Manju, R.V., Viji, M.M. 2021. High temperature induced changes in quality and yield parameters of tomato (*Solanum lycopersicum* L.) and similarity coefficients among genotypes using SSR markers. 2021. *Heliyon* 7: 1-15
- 19. Smera, G.S., Beena, T., Ananad, S. and **Sarada, S.** 2020. Studies on estimation of genetic parameters of anthurium (*Anthurium andreanum* Linden exAndre) genotypes. 2020. *J. Ornamental Hortic.* 23(2): 121-123
- 20. Lakshmi, G.A., Manju, R.V., Viji, M.M., Beena, R., Roy, S., **Sarada, S.**, Ammu, A.J., Srikanth, G.A., Manasa, R. and Srivardhan, V. 2020. Impact of growth regulators and nutrient application on flowering in tomato under CO<sub>2</sub> enrichment and associated high temperature. 2020. *International Journal of Agriculture Sciences* 12(6):9642-9644
- 21. Merin, E.G. and Sarada, S. 2019. Generation mean analysis for earliness and yield traits in yard long bean (*Vigna unguiculata* subsp. *sesquipedalis* (L.) Verdcourt). *Vegetable Science* 46(1&2): 139- 141
- 22. Merin, E.G., Sarada, S. and Celine, V.A. 2019. Pod set and pollen viability studies in yard long bean (*Vigna unguiculata* subsp. *sesquipedalis*). *Journal of Horticultural Sciences* 14(2): 169-172

- 23. Vijeth, S., Sreelathakumary, I., Sarada, S., Rafeekher, M., Umamaheswaran, K. and Soni, K.B. 2019. Heterosis studies for fruit yield and related traits in hot pepper (*Capsicum annuum* L.) under leaf curl virus disease severity conditions. *International Journal of Current Microbiology and Applied Sciences* 8(2): 644-655
- 24. Merin, E.G. and Sarada, S. 2019. Generation mean analysis in yard long bean (Vigna unguiculata ssp. sesquipedalis L. Verdcourt) for vegetative and yield characters. *Journal of Pharmacognosy and Phytochemistry* 8(1): 2684- 2687
- 25. Merin, E.G. and Sarada, S. 2019. Genetic analysis of yard long bean (*Vigna unguiculata* ssp. *sesquipedalis* L. Verdcourt) for vegetative and yield characters. *Journal of Tropical Agriculture* 57(1): 86-91
- 26. Merin, E.G., Sarada, S. and Sreelathakumary, I. 2018. Generation mean analysis for quality characters in yard long bean (*Vigna unguiculata* subsp. *sesquipedalis* (L.) Verdcourt). *Electronic Journal of Plant Breeding* 9(2): 141-145
- 27. Shashidhar, M.S., Sarada, S. and Anith, K.N. 2018. Screening of tomato hybrids for bacterial wilt resistance in pot culture. *International Journal of Chemical Studies* 6(3): 1958-1961
- 28. Feba, V. and Sarada, S. 2018. Variability among yard long bean hybrids for pod characters under open field and rainshelter. *The Bioscan* 13(2): 725-728
- 29. Sarada, S., Simi, S. and Sudhadevi, P. K. 2017. Maintenance of compact growth form suitable for pot culture in foliage plants using growth retardants. *Acta Horticulturae* 1165: 91-96
- 30. Simi, S., Sarada, S. and Sudhadevi, P. K. 2017. The effect of pre-cooling and holding solutions on the keeping quality of cut flower *Anthurium andrianum* var. 'White King'. *Acta Horticulturae* 1165: 97-100
- 31. Shalini, K.R. and Sarada, S. 2016. Performance of F<sub>1</sub> hybrids of tomato (*Solanum lycopersicum* L.) for yield and quality under open condition. *Advances in Life Sciences* 5(19): 8510-8513
- 32. Sarada, S. and Reghunath, B.R. 2014. Flowering and seeding variability in neelayamari (*Indigofera tinctoria* L.) accessions. 2014. *The Asian Journal of Horticulture* 9(1): 6-9
- 33. Ajithkumar, K.,Rajeevan, P.K., Sobhana, A., Sudhadevi, P.K., Sarada, S. and Simi, S. 2013. Effect of pulsing and holding solutions on vase life of *Dendrobium* cv. Sonia 17. 2013. *The Asian Journal of Horticulture* 8(2): 726-728
- 34. Jacob John and Sarada, S. 2012. Role of phenolics in allelopathic interactions. *Allelopathy Journal* 29(2): 215-230
- 35. Jacob John, Joy, M., Sarada, S., Sinoby, V. and Saritha, N. S. 2011. Seasonal and system wise variation in disease and insect pest incidence in plantation crops of Wayanad district. 2011. *Journal of Plantation crops* 39(1): 105-109
- 36. Jacob John, Shirmila, J., Sarada, S.and Anu, S. 2010. Role of Allellopathy in vegetable crops production. *Allellopathy Journal* 25 (2): 275-312
- 37. Sarada, S. and Reghunath, B.R. 2009. Performance of Indian indigo (*Indigofera tinctoria* L.) accessions as intercrop in coconut garden. *Journal of Plantation crops* 37 (3): 212-216
- 38. Sheela, V.L, Sarada S. and Anita, S. 2009. Additive effects of gamma irradiation on the development of protocorm like bodies and shoots in *Dendrobium* cv. Sonia 17. *The Journal of The orchid Society of India* 23(1&2): 11-13

- 39. Sarada, S. and Reghunath, B.R. 2008. Performance of *Indigofera tinctoria* L. accessions under open and shaded conditions. *Journal of Medicinal and Aromatic Plant Sciences* 30: 11-15
- 40. Sheela, V.L, Anita, S. and Sarada S. 2007. Effect of PGRs on *in vitro* rooting in γ-irradiated *Dendrobium* cv. Sonia shoots. *The Journal of The orchid Society of India* 21 (1& 2): 1-2
- 41. Sheela, V.L, Sarada S. and Anita, S. 2007. Development of protocorm-like bodies and shoots in Dendrobium *cv*. Sonia following gamma irradiation. *Journal of Tropical Agriculture* 44 (1-2): 86-87
- 42. Sarada, S. and Reghunath, B.R. 2006. Estimation of indigo dye in *Indigofera tinctoria* L. Accessions. *South Indian Horticulture* 54 (1-6): 342- 346
- 43. Sheela, V.L, Sarada S. and Anita, S. 2006. Micropropagation of orchids. *Journal of Ornamental Horticulture* 9 (1): 1-11
- 44. Sarada, S., Reghunath, B.R. and Vijayaraghavakumar. 2006. Genetic analysis in Indian indigo (*Indigofera tinctoria* L.). *Journal of Medicinal and Aromatic Plant Sciences* 28 (2): 174-177
- 45. Sheela, V.L, Anita, S. and Sarada S., Seema, S. and Rajmohan, K. 2004. Effect of growth regulators on *in vitro* propagation of gladiolus (L.) cv. Vinksglory. *Journal of Ornamental Horticulture* 7 (3&4).
- 46. Sheela, V.L, Rajmohan, K., Anita, S. and Sarada S. 2004. Effect of growth regulators on the development and multiplication of protocorm like bodies in Dendrobium cv. Sonia. *The Journal of The orchid Society of India* 18: 21-23
- 47. Sarada, S., Sreekandan Nair, G. and Reghunath, B.R. 2004. Growth and yield of medicinally valuable weed flora in oil palm plantations of Kerala. *GEOBIOS* 31 (4): 241-244
- 48. Sundaresan Nair, C., Sreedaya, G.S., Sarada, S., Bindhu J.S. and Vyas, N.G. 2003. Efficiency of Rajphos compacted with monoammonium phosphate or single superphosphate for growth and yield of rice. *Journal of Tropical Agriculture* 41 (1&2): 45-46
- 49. Sarada, S., Sreekandan Nair, G. and Reghunath, B.R. 2002. Quantification of medicinally valuable weeds in oil palm plantations of Kerala. *Journal of Tropical Agriculture* 40 (1&2): 19-26
- 50. Sarada, S. and Sreekandan Nair, G. 2001. Identification of medicinally valuable weed flora in oil palm plantations of Kerala. *Plant Horti Tech* 3 (2): 41- 42

#### **Popular Articles**

- 1. Sarada, S. and Rakhi, R. 2023. Athyulppaadana sheshiyulla pachakkari inangal adikaadaayathinu. *Krishiyankanam* 6(1): 25-28
- 2. Thasni, A., Sarada, S. and Swapna Alex. 2023. Tissue culture thaikal ini kovalilum. *Karshakan* 31(1): 12-14
- 3. Merin, E.G., Syama S.T. and Sarada, S. 2022. Naadan ilakkarikal- oru poshaka kalavara. *Keralakarshakan*: 60- 66
- 4. Sarada, S. and Shruthy, O.N. 2022. Orungaam sheethakaala pachakkari krishikku. *Krishi Jaagaran* 7(10): 18-22
- 5. Sarada, S. and Airina, C.K. 2022. Venalkkaala pachakkarikrishi. Keralakarshakan: 49-53

- 6. Arya, P.J. and Sarada, S. 2021. Sheethakaalathu ini beetroot krishiyum. *Keralakarshakan* 67 (2): 66-67
- 7. Shruthy O.N., Sarada, S. and Nisha S.K. 2021. Thayaaredukkaam ini sheethakaala pachakkari krishikkaayi. *Keralakarshakan* 67 (2): 62-65
- 8. Sarada. S., Shruthy O.N., Sreelathakumary, I. and Celine, V. A. 2021. Parichayappedam puthiya pachakkari inangale. *Keralakarshakan* 66(12): 23-24
- 9. Sarada, S., Shruthy O.N., Sreelathakumary, I. and Celine, V.A. 2021. Valarthaam puthiya pachakkari inangal. *Karshakasree* 27(4):50-51
- 10. Sarada, S. 2021. Samshayamakatti Krishi. Vanitha 47(2): 98-99
- 11. Sarada, S. 2021. Pachakkariyude vilavinum valarchaykkum. Vanitha 46(22): 86-87
- 12. Sarada, S., Ameena, M. and Joy, M. 2020. Growbagile pachakkarikrishikkoru krishi calendar. *Keralakarshakan* 66(2): 37-40
- 13. Shruthy O.N., Sreelathakumary, I. and Sarada, S. 2019. Protray thai ulpathanavum nursery paripaalanavum. *Keralakarshakan* 65(5): 48-50
- 14. Shruthy, O.N., Sreelathakumary, I. and Sarada, S. 2019. Sheethakaala Pachakkarikrishikku samayamaayi. *Kerala Karshakan* 65 (3): 16-19
- 15. Shruthy, O.N., Sreelathakumary, I. and Sarada, S. 2019. Pachakkarikrishi Jaivareethiyil. *Kerala Karshakan* 65 (3): 16-19
- 16. Sreelathakumary, I., Sarada, S. and Rafeekher, M. 2018. Sambarinu ruchiyekum sambar vellari. *Kerala Karshakan* 63(14): 29-30
- 17. Merin, E.G. and Sarada, S. 2018. Microgreens- nutritious leafy vegetables. *Kerala Karshakan* [English e-journal] 5(12).
- 18. Sarada, S. 2017. Mazhamarayil pachakkarikrishi. Krishiyankanam 23 (3): 30-31
- 19. Sarada, S. 2014. Pookkal vaarichoriyum poovallikal. Kerala Karshakan
- 20. Sarada, S. 2012. Health at every home-grow medicinal plants. *VATIKA* (IAHS) Winter 2012, Issue 4: 5-8
- 21. Suja Abraham, Sarada, S. and Kuruvila Varghese. 2010. Mannile amlataha-dushyangalum pariharangalum. *Karshakan*
- 22. Sarada, S. 2005. Neelum-naisargigathayode. Kerala Karshakan
- 23. Sarada, S., Devi, V.S. and Rajamanickam, C. 2002. Asoka- medicinal tree. Kisan World
- 24. Rajamanickam, C., Sarada, S., Padmanabhapillai, N. and Kandasamy, R. 2001. Menace of mango stem borer. *Weekly Udyaniki Jeevan*
- 25. Rajamanickam, C., Padmanabhapillai, N., Kandasamy, R. and Sarada, S. 2001. Anthracnose (fruit rot) and die back- the serious maladies of chillies. *Weekly Udyaniki Jeevan*
- 26. Rajamanickam, C., Sarada, S., Padmanabhapillai, N., and Kandasamy, R. 2001. Fruit fly-A major pest in bittergourd. *Weekly Udyaniki Jeevan*
- 27. Rajamanickam, C., Padmanabhapillai, N., Kandasamy, R. and Sarada, S. 2001. Leaf curl virus- a serious disease in chillies. *Weekly Udyaniki Jeevan*
- 28. Rajamanickam, C., Padmanabhapillai, N., Kandasamy, R. and Sarada, S. 2001. Fruit cracking- a physiological disorder in tomato. *Weekly Udyaniki Jeevan*
- 29. Sarada, S. 2001. Veettuvalappile oushadasasyangal. Kerala Karshakan
- 30. Rajamanickam, C., Padmanabhapillai, N., Kandasamy, R. and Sarada, S. 2001. Menace to onion smut. *Weekly Udyaniki Jeevan*
- 31. Sarada, S. 2001. Ennapanathottathile oushadasasyangal. Kerala Karshakan
- 32. Rajamanickam, C., Sarada, S., Padmanabhapillai, N., and Kandasamy, R. 2001. Anar butterfly- a major pest in pomegranate. *Weekly Udyaniki Jeevan*
- 33. Sarada, S., Rajamanickam, C. and Padmanabhapillai, N. 2001. Medicinal properties of pomegranate. *Weekly Udyaniki Jeevan*

#### **Books/ Chapters in Books**

- 1. Sarada, S. and Reghunath, B.R. 2014. Evaluation of Indigofera tinctoria L. for yield and glycoside content. LAP LAMBERT Academic Publishing Company, Germany, p. 207
- 2. Celine, V.A. and Sarada, S. 2021. Drumstick. In: Singh, B. and Peter, K.V. (eds.), Greens, Sprouts and edible flowers. Brillion publishing, 393p.
- 3. Sarada, S. and Merin, E.G. 2019. Pachakkarikrishi Polybagil. In: Ameena, M. (ed.), Growbag Krishikkoru Maargarekha (malayalam), pp. 18-23
- 4. Merin, E.G. and Sarada, S. 2018. Biofortification in vegetable crops to alleviate malnutrition. In: Lodhi, S.K. (ed.), Advances in Horticulture Vol.3. Akinik Publications, New Delhi, pp. 87-101
- 5. Training manual on Floriculture, Farm Information Bureau. 2018.
- 6. Sarada S. 2015. Plants for dyes. In: Peter, K.V. (ed.) Climate Resilient crops for the future. New India Publishing agency, New Delhi, pp. 317-334

### Seminar abstracts/ proceedings: 58

### Student Guidance (Major Advisor/ Advisory Committee member)

#### M. Sc. Completed: Major advisor - 12 Advisory committee member - 45 Ongoing: Major advisor - 4 Advisory committee member - 9 Ph. D Completed: Major advisor - 1 Advisory committee member - 10 - 5 Ongoing: Major advisor Advisory committee member - 13

## Other Institutional Responsibilities

- 1. Member of "Poshaka Samrudhi Mission" of Directorate of Agriculture, Dept. of Agriculture& Farmers' Welfare, Govt. of Kerala
- 2. Member of the project coordination group on vegetables.
- 3. Member of the Multidisciplinary diagnostic team 'Karshaka Santhwanam' under RARS (SZ), Vellayani to address field problems of farmers in Kerala.
- 4. Student Advisor/ Faculty mentor to 20 Undergraduate students.

# **Membership in Professional Associations**

- 1. Life member of The Horticultural Society of India.
- 2. Life member of Indian Society of Vegetable Science.
- 3. Life member of Indian Society of Vegetable Science.
- 4. Life member of Society for Promotion of Horticultural Science.