

## **Biodata of the Scientist**

Division/Section : All India Coordinated Research Project on Tuber Crops

### **A. Personal information**

1. Name(With Title) : Dr.(Mrs.) S.SUNITHA
2. Qualification : M.Sc.(Ag.), Ph.D., ARS
- 3 Designation: Principal Scientist
4. Address(Personal): T.C.33/ C-413, Thiruvonam,  
Manikantaswaram P.O., Vattiyoorkavu,  
Thiruvananthapuram- 695 013
5. Phone Numbers:  
(a)Residence (b)Intercom 132 (c) Mobile 09446396026
6. Email: *sunitharajan1@rediffmail.com, sunithaicar@gmail.com*
7. Countries visited: NIL

### **B. Professional information**

1. Area of specialization : Agronomy
2. Area of interest : Water management, Cropping systems,  
Organic recycling, Nutrient management
3. Number of institute projects completed(Add list) : 7
  1. Utilization of oil palm wastes for nutrient management
  2. Nutrient recycling in oil palm plantations for nutrient management
  3. Fertilizer requirement of oil palm during pre bearing stage
  4. Agro techniques and land use systems for soil, water and nutrient conservation in oil palm plantations of hill slopes
  5. Performance of oil palm in peat soils of Kerala
  6. Studies on replanting techniques in oil palm
  7. Utilization of biogas slurry from POME for nutrient management of oil palm
  8. Development of composting techniques for oil palm wastes
  9. Multidisciplinary approaches for transfer of technology and area expansion in relation to oil palm development in India
4. Number of Institute projects being handled(Add list) : 4
  1. Water management of tropical tuber crops

2. Precision approaches in tuber crops cultivation
3. Cropping systems involving short duration cassava
4. Rapid multiplication of disease free planting materials

5. Number of externally funded projects completed(Add list): 4

1. Studies for developing optimum fertilizer schedule for oil palm nursery
2. Nutrient recycling in oil palm plantations for nutrient management
3. Development and evaluation of soil and water conservation measures and land use systems for sustainable crop production in Western Ghat region.
4. Training of extension, research workers and farmers involved in oil palm

production

5. Seed production in agricultural crops and Fisheries

6. Number of externally funded projects being handled(Add list):

7. Number of students guided for a) Ph.D \_\_\_\_--\_\_\_\_ b) M.Phil \_\_--\_\_ c) M.Sc \_\_\_\_--

8. Number of students being guided for a) Ph.D \_\_\_\_\_ b) M.Phil \_\_\_\_\_ c) M.Sc \_\_\_\_\_

8.a. information about the students under your guidance

Name of the student	Course undergoing (Ph.D/M.Phil/M.Sc)	Title of the project/Thesis	E-mail address

9. Information on guide ship

Guide ship for Ph.D/ M.Phil/ M.Sc	University	Subject

10. Number of Research papers(Add list):

1. Sunitha,S. and Krishnakumar,T. 2006. Biomass production and potential nutrient contribution from Oil Palm at felling. *Journal of Plantation Crops*, **34**(3): 309-311.

2. Sunitha,S.and Varghese,P.T. 2009.Biomass production and potential nutrient contribution from Oil Palm annually and at felling. *International Journal of Oil palm*. **6(1)**:39-41.
  3. Sunitha, S. and Varghese P.T.2009. Effect of agrotechniques and bioengineering measures for soil, water and nutrient conservation in oil palm plantations in high rainfall areas. *International Journal of Oil Palm*, **6(2)**: 29-32.
  4. Prasad, M.V., Sunitha, S. and Kochubabu, M. 2009. Adoption of oil palm in kari lands of Kerala under rainfed conditions-A case study, *International Journal of Oil Palm*, **6(2)**: 21-23.
  5. Sunitha,S. and Varghese,P.T. 2009. A multi tier cropping for oil palm under rainfed conditions. *International Journal of Oil palm* **6(1)**: 69-70.
  - Sunitha,S. and Varghese,P.T. 2009. Economics of nutrient recycling in oil palm plantations. *International Journal of Oil palm* **6(1)**: 71-72
11. Number of Books/Book chapters(Add list): 3

1. Sunitha, S. 2009.Management of Oil Palm seed gardens- In: Compendium of lectures on Oil Palm hybrid seed production (ed. M.V.Prasad), Directorate of Oil Palm Research, Pedavegi. Andhra Pradesh.)
2. Sunitha, S. 2010. Oil Palm production technology under rainfed conditions. In: Compendium of lectures on Oil Palm production technology (ed. M.V.Prasad), Directorate of Oil Palm Research, Pedavegi. Andhra Pradesh.).
3. Prasad,M.V. , Sunitha,S., Jayanthi,M. and Kochubabu, M.2012. Participation of women in oil palm production and processing In: Women in Horticulture and women- friendly technologies, (ed. Tripathi, P.C., Krshna Srinath, Shukla, A.K., Kundan Kishore and Naresh Babu), Directorate of Research on women in Agriculture, Bhubaneswar, Odisha.

12. Number of Technical Bulletins(Add list): --

13. Consultancies offered(Add list and give a brief description):

- 1) Nursery management techniques of Oil Palm
- 2) Cultivation aspects of oil palm
- 3) Nutrient recycling in oil palm

- 4) Replanting techniques in oil palm
- 5) Agro techniques of tuber crops
- 6) Planting material production techniques in tuber crops

14. Technologies developed(Add list and give a brief description):

1. The fertilizer requirement of oil palm during pre-bearing stage under replanted situations.
2. Quantified the potential biomass production and nutrient contribution from an oil palm plantation at the time of felling.
3. Evolved a suitable inter/mixed cropping model in mature oil palm.
4. Developed suitable agronomic management practices for minimizing run-off, soil and nutrient losses from oil palm plantations in sloppy areas.
5. Evolved half moon basin cutting and forming trenches in between palm lines as soil and water conservation measures for hill slopes.
6. Developed *in situ* composting of oil palm plantation wastes such as leaves and empty fruit bunches.
7. Mulching with empty fruit bunches was found to be advantageous for nutrient enrichment as well as soil and water conservation.
8. Integration of fodder grass in oil plantation offered scope for mixed farming systems for ecological and economic benefits.
9. Evolved a suitable technique of replanting oil palm at the time of felling for small scale plantations.
10. Developed a viable technology for utilization of palm oil mill effluent for large scale production of biogas.
11. Quantified the potential biogas production from Palm oil mill effluent.
12. Developed an eco friendly way of disposing the palm oil mill effluent (POME) after reducing the BOD and COD levels to acceptable limits for safe land application.
13. Composting technology for composting empty fruit bunches from palm oil mill using fresh POME and digested biogas slurry was developed.
14. Worked out suitable management strategies for soil, water and nutrient management for oil palm planted in Kari lands (peat soils) of Kerala for maximizing the yield levels.
15. Standardized the technique of large scale vermicomposting of oil palm biowastes using earth worms, *Eudrillus euginiae*.

15. Patents/Copyrights obtained (Add list and give a brief description):---

16. Any other information:---