SCIENTIST PROFILE

1. Name & Designation : Dr. Sanghamitra Samantaray
   Principal Scientist
2. Date of Birth : 14th October, 1963
3. Date of joining ICAR : 25th April, 2003
4. Date of joining the present post : 25th April, 2009
5. Qualification (highest degree) : D.Sc.
6. Post Doctoral Research Experience/Training:
   - Training on Leadership and Personality development at NAARM, Hyderabad from 14-20 June, 2006
   - Short –term training course on "Recent techniques in plant genetic engineering and molecular breeding "sponsored by the National Agricultural Technology Project (ICAR) at the National Research Centre on Plant biotechnology, IARI, New Delhi from 25th Sep to 15th Oct 2003
   - Training programme on wise use of wet lands held in Calcutta from 2nd - 6th Feb 1998.
   - International Training Programme on Plant Transformation at International Centre for Genetic Engineering and Biotechnology (ICGEB) from 4th - 25th November, 1996.
   - National workshop on Plant Molecular Biology, 10th November to 30th November, 1995 at Osmania University, Centre for Plant Molecular Biology, Department of Genetics, Hyderabad (Sponsored by department of Biotechnology, Government of India, New Delhi).
7. Area of Specialization/research interest: Biotechnology-Plant science
8. Significant Contribution including products and patents (Five bullets):
   - Standardized green shoot regeneration protocol via callusing from anthers of hybrid rice variety, CR Dhan 701.
   - Made microsatellite based DNA fingerprinting database of CRRI released rice (*Oryza sativa* L.) varieties and aromatic genotypes of Odisha collections.
   - Developed rapid micropropagation protocol for *Chlorophytum borivillianum*, *C. arundinaceum, Aloe barbadensis, Vitex trifolia and Glycyrrizae glabra*.
   - Developed DNA isolation protocol in Guggal (*Commiphora wightii*) and identified sex specific DNA markers in Betel vine (*P. betel*) and guggal (*Commiphora wightii*).
   - Registered the genetic stock of *Centella asiatica* (INGR-08105) and released the variety as "Vallabh-Medha", a high-yielding *C. asiatica.*
9. Awards/Honours:
   - Resource person in the workshop "Tissue Culture Technique for growing of *Aloe vera*" held at Agartala organized by NEDFI R & D Center on MAP, Nagicherra, Agartala.
   - Vice President, Medicinal and Aromatic Plant Association of India, Directorate of Medicinal and Aromatic Plants Research, Boriavi, Anand, Gujarat.
   - Lead lecture in the workshop entitled "Hands on training on Molecular Biology, Fermentation Technology and Bioinformatics' on 8th Feb., 2012 organized by Dept. Of Biotechnology, College of Engineering and Technology (CET), Bhubaneswar.
   - Chief Speaker in celebration of 12th Annual Function of Botany Department, S.G. College, Jajpur on 3rd Feb. 2012.

- Guest speaker in the seminar on "Popular Lecture on Biotechnology" financed by DBT-CTEP management Cell, Govt. of India on 8th Feb., 2013 at Sankalp Day Boarding School, Berhampur, Ganjam.

10. Publications (10 best):

i. **Samantaray S,** Phurailatpam AK, Bishoyi AK, Geetha KA and Maiti S (2011) Identification of sex-specific DNA markers in Betel vine (*Piper betle* L.). **Genetic Resources and Crop Evolution** 59: 645–653.

ii. **Samantaray S** and Maiti S (2011) Factors influencing rapid clonal propagation of *Chlorophytum arundinaceum* (Liliales: Liliaceae): an endangered medicinal plant. **International Journal of Tropical Biology and conservation** 59(1): 435-445.

iii. **Samantaray S,** Geetha KA, Kumar T and Maiti S (2011) Identification and assessment of genetic relationships in three Chlorophytum species and two high yielding genotypes of *C. borivilianum* through RAPD markers. **Biologia** 66(2): 244-250.

iv. **Samantaray S**, Urvik DM, Maiti S (2010) Evaluation of genetic relationships in Plantago species using Random Amplified Polymorphic (RAPD) Markers. **Plant Biotechnology** 27: 297-303.

v. **Samantaray S** and Maiti S (2010). *In vitro* organogenesis in *Aloe barbadensis* Mill.: An aloin A rich plant. **Indian Journal of Horticulture** 67(1): 80-84.

vi. **Samantaray S,** Hidyath KP, Geetha KA and Maiti S (2010) Identification of RAPD markers linked to sex determination in Guggal {*Commiphora wightii* (Arnott.)} Bhandari**. Plant Biotechnology Reports** 4(1): 95-99.

vii. **Samantaray S** and Maiti S (2010). An assessment of genetic fidelity of micropropagated plants of *Chlorophytum borivilianum* Santpau and Fernandes using Random Amplified Polymorphic DNA (RAPD) markers. **Biologia Plantarum** 54(2): 334-338.

viii. **Samantaray S,** Hidyath KP and Maiti S (2009). An isolation protocol of genomic DNA from *Commiphora wightii* (Arnott.) Bhandari: An endangered medicinal plant, **International Journal of Integrative Biology** 6(3): 127-131.

ix. **Samantaray S**, Saroj VK and Maiti S (2009). Direct shoot regeneration from immature inflorescence cultures of *Chlorophytum arundinaceum* and *Chlorophytum borivilianum*. **Biologia** 64(2): 305-309.

x. **Samantaray S** and Maiti S (2008). Rapid plant regeneration and assessment of genetic fidelity of *in vitro* raised plants in *Aloe barbadensis* Mill. Using RAPD markers. **Acta Botanica Gallica** 155(3): 427-434.