Profile

Dr R Elanchezhian

Designation: Principal Scientist
Division of Soil Chemistry & Fertility

☎ [+91-755-2730970 (242),
Fax: +91-755-2733310]
✉ [elanchezhian.r@icar.gov.in;
elanrc@gmail.com]

Research specialization:

Abiotic stress tolerance; crop productivity enhancement; impact, adaptation studies on climate change; nutrient use efficiency of crops

Professional Experience:

Scientist (1998-2006): Plant physiological and biotechnological research work on biodiversity, stress tolerance and productivity enhancement in agri-horticultural crops

Senior Scientist (2006-2012): Plant physiological and biotechnological research work on abiotic stress tolerance; and Impact, adaptation studies on climate change on agriculture

Prinicpal Scientist (2012-till now): Plant physiological and nano-technological research work on nutrient use efficiency in crops

Awards and Honours:

1. Awarded **ICAR Junior Research Fellowship** during M.Sc. (Plant Physiology).
2. Awarded **ICAR Senior Research Fellowship and CSIR Senior Research Fellowship** for Ph.D. Plant Physiology.
3. Awarded **Dr. GS Sirohi Award** by the Indian Society for Plant Physiology at 2nd International Congress of Plant Physiology held at New Delhi, India during 2003.
4. Awarded **Dr. RD Asana Award for Young Scientist** by the Indian Society for Plant Physiology during 2005.
5. Awarded **Fellow of Indian Society for Plant Physiology** for contribution in the field of Plant Physiology and Cognate sciences in the year 2008.
6. Awarded **NAIP traineeship** for an International Training on **Marker assisted selection** at Department of Genetics & Biochemistry, Clemson University, USA during 2011.

7. Awarded as **Fellow of National Academy of Biological Sciences** for the Agriculture/ Forestry Science section during 2017.
8. Acting as **Editor** of Indian Journal of Plant Physiology of Indian Society for Plant Physiology since June 2018.
9. Elected as **Zonal Secretary for Central zone** of Indian Society for Plant Physiology comprising Madhya Pradesh, Rajasthan, Chhattisgarh and Jharkhand for three years 2019-2021.

Top Ten publications:

1. **Elanchezhian R** and Panwar JDS (1997) Effect of 2,4-D and *Azospirillum brasilense* on nitrogen fixation, photosynthesis and grain yield in wheat. *Journal of Agronomy and Crop Science* **178**: 129-133.
2. **Elanchezhian R** and Panwar JDS (1999) Effect of 2,4-D and *Azospirillum brasilense* on nodulation and nitrogen fixation in wheat. *Indian Journal of Agricultural Sciences* **69** (1): 58-61.
3. **Elanchezhian R** and Srivastava GC (2001). Physiological responses of chrysanthemum petals during senescence. *Biologia Plantarum*, **44** (3): 411-415.
4. **Elanchezhian R** and Mandal AB (2007) Growth analysis of somaclones generated from a salt tolerant traditional 'Pokkali' rice (*Oryza sativa*). *Indian Journal of Agricultural Sciences* **77** (3): 184-187.
5. **Elanchezhian R,** Senthil Kumar R, Beena SJ and Suryanarayana MA (2007) Ethnobotany of Shompens – a primitive tribe of Great Nicobar Island. *Indian Journal of Traditional Knowledge*, **6** (2): 345-351.
6. **Elanchezhian R,** Rajalakshmi S and Jayakumar V (2009) Salt tolerant characteristics of *Rhizobium* sp associated with *Vigna marina*, a wild legume of Andaman Islands. *Indian Journal of Agricultural Sciences* **79** (12): 980-985.
7. **Elanchezhian R**, A.A. Haris, S. Biswas and V. Chhabra (2012). Simulation of yield and its component traits of rice (*oryza sativa L.*) varieties grown in indo-gangetic plains of Bihar under projected climate change. *Indian Journal of Plant Physiology*. **17** (3 & 4): 195-202.
8. **Elanchezhian R**, Santosh Kumar, S. S. Singh, Dwivedi SK, Shivani and B. P. Bhatt (2013). Plant survival, growth and yield attributing traits of rice (*Oryza sativa* L.) genotypes under submergence stress in rainfed lowland ecosystem. *Indian Journal of Plant Physiology* **18** (4): 326-332; (DOI: 10.1007/s40502-013-0050-y).
9. **Elanchezhian R**, V Krisnapriya, R Pandey, A Subba Rao, YP Abrol (2015) Physiological and molecular approaches for improving phosphorus uptake efficiency of crops. *Current Science* **108** (7): 1271-1279.
10. **Elanchezhian R**, Kumar D Ramesh K, Biswas AK, Guhey A and Patra AK (2017). Morpho-physiological and biochemical response of maize (*Zea mays*) plants fertilized with nano-iron (Fe_3O_4) micronutrient. *Journal of Plant Nutrition* **40** (14), 1969–1977.