

## Profile of the Scientist



1. **Name of Scientist:** Dr. YOGESH EKANATHARAO THORAT
2. **Personal Bio data:**
  - a. **Position/Designation:** SCIENTIST
  - b. **Contact Details:**
    - (i) **ICAR Email ID:** [yogesh.thorat@icar.gov.in](mailto:yogesh.thorat@icar.gov.in)
    - (ii) **Personal Email ID:** [yogesh4897@gmail.com](mailto:yogesh4897@gmail.com)
    - (iii) **Mobile No:** 7028200698
  - c. **Joining Date in:**
    - (i) **ICAR:** 05<sup>TH</sup> JULY, 2016
    - (ii) **IISR:** 14<sup>TH</sup> NOVEMBER, 2016
  - d. **Discipline and Specialization:** SUGARCANE NEMATODOLOGY AND SPECIALIZED IN ENTOMOPATHOGENIC NEMATODOLOGY
  - e. **Training/advance exposure in the area of work:**
    - (i) **Professional attachment training:** As a part of the FOCARS training, the 3 months professional attachment training was completed at ICAR-NRCPB, New Delhi under the mentorship of Dr. P. K. Jain, (Principal Scientist) entitled as '*Isolation, screening and characterization of entomopathogenic nematodes (EPNs)*' from 22<sup>nd</sup> March to 21<sup>st</sup> June, 2017.
    - (ii) **Summer School Training:** Participated in ICAR sponsored 21 days summer school on '*Current techniques and advances in mass culturing of microbials for the production of bio pesticides*' from 5<sup>th</sup> to 25<sup>th</sup> September, 2017 at ICAR-NBAIR, Bengaluru.
    - (iii) **Short Course:** Participated in ICAR sponsored 10 days short course on '*Modern genomic tools and breeding strategies for biotic and abiotic stress management in sugarcane*' from 25<sup>th</sup> October to 3<sup>rd</sup> November, 2017 at ICAR-IISR, Lucknow.
  - f. **Contribution to the Scientific advancement:**

**Patents filed:** Following patents are regarding to the nucleotide sequences of specific gene/s from *Arabidopsis* whose expression was found to be significant upon nematode infection.

    1. Jain, P. K., Kakrana, A., Kumar, A., **Thorat, Y. E.**, Sirohi, A. and Srinivasan. 2016. Polynucleotide fragments for expression of genes in plant in response to pathogens and wounding. Patent No. 2245/DEL/2015.
    2. Jain, P. K., Kakrana, A., Kumar, A., **Thorat, Y. E.**, Sirohi, A. and Srinivasan. 2017. Polynucleotide fragments for expression of genes in plant roots in response to pathogens. Patent No. 2246/DEL/2015.

### 3. Future Planning of Research:

- (a) Studies on the prevalence and distribution of plant parasitic nematodes (PPNs) associated with sugarcane and diseases caused by them.
- (b) Bio efficacy of native entomopathogenic nematodes (EPNs) against soil insect-pests of sugarcane

### 4. Publications:

#### a. Published:

**Thorat, Y. E.**, Banerjee, S., Kumar, A., Manimaran, B., Jain, P. K., Pankaj. and Sirohi, A. 2017. *In silico* analysis of root-knot nematode, *Meloidogyne incognita* house-keeping gene. *Indian Journal of Nematology*. **47 (1):121-126.**

Singh, A. K., Kumar, A., Joshi, I., **Thorat, Y. E.**, Jain, P. K., Sirohi, A. and Pankaj. 2017. Evaluation of southern root-knot nematode responsive promoter against other important plant nematodes. *Indian Journal of Nematology*. **47 (1):115-120.**

#### b. Communicated:

**Thorat, Y. E.**, Jain, P. K. and Sirohi, A. 2017. Heterologous expression of nematode-responsive, root-specific promoter in tomato, *Solanum lycopersicum* L. against southern root-knot nematode parasitism. *Indian Journal of Genetics and Plant Breeding*.

### 3. Other relevant activities of Scientist:

Participated in ICAR-Zonal tournament (North Zone)-2017 held at ICAR-IISR, Lucknow and represented ICAR-IISR institute in volleyball sport (group) event.