


## **Personal Information**

Name	DR. YOGESH EKANATHRAO THORAT 
Designation	Scientist (Senior Scale)
Division/Section	ICAR-IISR, Biological Control Centre, Pravaranagar (Maharashtra)
Research Area	1. Sugarcane Nematology 2. Entomopathogenic Nematology 3. Biological control

## **Patent Details**

1. Polynucleotide fragments for expression of genes in plant in response to pathogens and wounding. No. 2245/DEL/2015
2. Polynucleotide fragments for expression of genes in plant roots in response to pathogens. No. 2246/DEL/2015
3. Insect trapping device with a combination of light and pheromone. No. 202111035518

## **External Funded Projects**

1. Rashtriya Krishi Vikas Yojana (RKVY), Govt, of Maharashtra sponsored research project on ‘Establishment of biological control laboratory for mass production of biological agents against sugarcane insect pests and diseases and dissemination

of technology for enhanced cane and sugar productivity in Maharashtra' (Co PI) (Rs. 5 Cr.)

**Contractual research projects:**

2. Bio-efficacy testing of entomopathogenic fungi as a biopesticide against white grubs and whitefly in sugarcane (PI) (VSI, Pune sponsored, Rs. 5 Lakhs)
3. Efficacy of F4337-500 g/I SC against major insect pests of sugarcane (white grub, ESB and termites) (PI) (FMC India Pvt Ltd, Rs. 15 Lakhs)
4. Bio efficacy and phytotoxicity evaluation of Solomon 300 OD against black bug infestations in sugarcane (PI) (Bayer Crop science ltd. Rs. 13 Lakhs)
5. Bio efficacy and phytotoxicity evaluation of Aclonifen 500 G/L + Diflufenican 100 G/L against complex weed flora in sugarcane and its effect in succeeding crop (PI) (Bayer Crop science ltd. Rs. 20 Lakhs)

**Publications**

- a. Thorat, Y. E., Banerjee, S., Kumar, A., Manimaran, B., Jain, P. K., Pankaj. & Sirohi, A. 2017. *In silico* analysis of root-knot nematode, *Meloidogyne incognita* house-keeping gene. *Indian Journal of Nematology*. **47 (1)**:121-126
- b. Singh, A. K., Kumar, A., Joshi, I., Thorat, Y. E., Jain, P. K., Sirohi, A. & Pankaj. 2017. Evaluation of southern root-knot nematode responsive promoter against other important plant nematodes. *Indian Journal of Nematology*. **47 (1)**:115-120
- c. Jadhav S., Manimaran B., Thorat Y. E., Jain P. K. & Sirohi A. (2020). *In silico* analysis of *ama-I* gene of southern root-knot nematode, *Meloidogyne incognita*. *Indian Journal of Nematology*. **49 (2)**: 173-178
- d. Kumar, K.K., George, A., Behere, G.T. et al. (2022). Pathogenicity of *Heterorhabditis indica* against developmental stages of *Eudocima materna* L. (Lepidoptera, *Erebidae*). *Egyptian Journal Biological Pest Control* 32, 65. <https://doi.org/10.1186/s41938-022-00563-1>

#### **Books or Chapter Published**

1. Chavan S N, Somashekhar N, Thorat Y E, Thube S H, Bandeppa and Mhatre P. H. 2019. Entomopathogenic nematodes: a green strategy for management of insect pests of crops. *Advances in Agricultural Entomology* vol. IV Akinik Publication New Delhi, pp: 127-157
2. Raj C, Singh S, Goswami S. K, Singh M, Gopi R, Kapoor C and Thorat Y E. 2023. Diseases of sugarcane (*Saccharum officinarum*) and their integrated management. *Diseases of commercial crops and their integrated management*. Elite Publishing House New Delhi. Pp: 179-229

#### **Awards**

1. ICAR JRF Fellowship for post graduate program at ICAR-IARI, New Delhi (2009)
2. ICAR SRF Fellowship for doctoral research program at ICAR-IARI, New Delhi (2011)
3. DST-INSPIRE fellowship from Ministry of Science and Technology, Govt. of India for Ph. D programme at ICAR-IARI, New Delhi (2012)
4. Prof. Dr. D. J. Raski merit medal award by Nematological Society of India (NSI), IARI, New Delhi (2019)
5. Appreciation award from ICAR-NAARM, Hyderabad (2016)
6. Best Poster presentation award in SUGARCON-2019 international conference held in February 2019 at ICAR-IISR, Lucknow
7. Best Oral presentation award in 7<sup>th</sup> IASPIT SUGARCON-2022 international conference held in October 2022 at ICAR-IISR, Lucknow
8. Best Poster presentation award in 7<sup>th</sup> IASPIT SUGARCON-2022 international conference held in October 2022 at ICAR-IISR, Lucknow