

Profile

1. Name: Dr. Somnath Suresh Pokhare

2. Designation: Senior Scientist (Nematology & I/C Extension)

3. Email: somnath.icar@gmail.com; somnath.pokhare@icar.gov.in

4. Phone number: 9922100401 Office extension: 48

5. Academic Qualification:



S.N.	Degree	Year	Subject	University/Institution	% Marks/ grade
1.	Doctor of Philosophy (Ph.D.)	2018	Agriculture (Molecular Phytomedicine)	Institute of Crop Science and Resource Conservation (INRES), University of Bonn, Germany.	Very good grade
2.	Master of Science (M.Sc.)	2010	Agriculture (Nematology)	Indian Agricultural Research Institute (IARI), New Delhi	82.90
3.	Bachelor of Science (B.Sc.)	2008	Agriculture	Dr. Balasaheb Sawant Konkan Krishi Vidyapeeth, Dapoli, Maharashtra (Dr. BSKKV, Dapoli)	80.06

6. Joining date in ICAR: 15/09/2011

7. Joining date at ICAR-NRCP, Solapur: 13/08/2020

8. Areas of Research specialization: Nematology

9. Publications (Best 10):

- Pokhare, Somnath S.**, Peter Thorpe, Pete Hedley, Jennifer Morris, Samer S. Habash, AbdelNaser ElAshry, Sebastian Eves-van den Akker, Florian M.W. Grundler & John T. Jones (2020). Signatures of adaptation to a monocot host in the plant-parasitic cyst nematode *Heterodera sacchari*. *Plant journal*. <https://doi.org/10.1111/tpj.14910>. (NAAS:11.73).
- N. Manjunatha., **Somnath S. Pokhare.**, Jyotsana Sharma., Prakash G. Patil., Ruchi Agarrwal., Mansi G. Chakranarayan., Jaydip D. Sirsat., Jyoti Patil., Rajiv. A. Marathe (2023). Collar rot caused by *Calonectria hawksworthii*, a new record for pomegranate (*Punica granatum*). *Journal of Plant Pathology*. <https://doi.org/10.1007/s42161-023-01391-4>. (NAAS: 10.60)

3. Sharma Jyotsana; Manjunatha, N; **Pokhare, Somnath S**; Patil, Prakash G; Agarrwal, Ruchi; Chakranarayan, Mansi G; Aralimar, Anita; Devagire, Priya; Marathe, Rajiv A (2022). Genetic Diversity and Streptomycin Sensitivity in *Xanthomonas axonopodis* pv. *punicae* Causing Oily Spot Disease in Pomegranates. *Horticulturae*, 8(5), 441 <https://doi.org/10.3390/horticulturae8050441>. (NAAS: 9.10)
4. Manjunatha N., Jyotsana Sharma, **Somnath S. Pokhare**, Ruchi Agarrwal, Prakash G. Patil, Jaydip D. Sirsat, Mansi G. Chakranarayan, Aarti Bicchal, Anmol S. Ukale, Rajiv A. Marathe (2022). Characterization of *Alternaria* and *Colletotrichum* Species Associated with Pomegranate (*Punica granatum* L.) in Maharashtra State of India. *Journal of Fungi*, 8(10), 1040 DOI:10.3390/jof8101040. (NAAS:10.70).
5. Richard Raj Singh, Bruno Verstraeten, Shahid Siddique, Adelahu Mekonene Tegene, Raimund Tenhaken, Michael Frei, Ashley Haeck, Kristof Demeestere, **Somnath Pokhare**, Godelieve Gheysen, Tina Kyndt. (2020) Ascorbate oxidation activates systemic defence against root-knot nematode *Meloidogyne graminicola* in rice, *Journal of Experimental Botany*, eraa171, <https://doi.org/10.1093/jxb/eraa171>. (NAAS:11.36).
6. Diaz-Granados A, Sterken MG, Overmars H, Roel Ariaans, Martijn Holterman, **Somnath S Pokhare**, et al., (2020). The effector GpRbp-1 of *Globodera pallida* targets a nuclear HECT E3 ubiquitin ligase to modulate gene expression in the host. *Molecular Plant Pathology* 21(1):66-82. doi:10.1111/mpp.12880. (NAAS:10.19).
7. **Pokhare, S. S.**, Habash, S. S., Jones, J.T., Elashry, A. and Grundler, F.M.W. (2019). *In vitro* life cycle of *Heterodera sacchari* on Pluronic gel. *Nematology* 21(6), 573-579. (NAAS:7.20).
8. Totan Adak, Arup Kumar Mukherjee, **Somnath S Pokhare**, Manoj Kumar Yadav, Manas Kumar Bag, Srikanta Lenka, Sushmita Munda, Mayabini Jena (2019). Target and non-target effect of commonly used fungicides on microbial properties in rhizospheric soil of rice. *International Journal of Environmental Analytical Chemistry* 100(12):1350-1361. (NAAS: 7.37).
9. Basana Gowda G., G. P. Pandi G., Farman Ullah., N. B. Patil, M. Sahu, T. Adak, **Somnath Pokhare**, M. K. Yadav, Annamalai M., P. Mittapelly, Nicolas Desneux, P. C. Rath (2021). Performance of *Trichogramma japonicum* under field conditions as a function of the factitious host species used for mass rearing. *PLoS ONE* 16(8): e0256246. <https://doi.org/10.1371/journal.pone.0256246>. (NAAS: 9.24).
10. Upendra Kumar, J Berliner, Totan Adak, Prakash C Rath, Avro Dey, **Somnath S Pokhare**, Nitiprasad N Jambhulkar, P Panneerselvam, Anjani Kumar, Shyamranjan D Mohapatra. (2017). Non-target effect of continuous application of chlorpyrifos on soil microbes, nematodes and its persistence under sub-humid tropical rice-rice cropping system. *Ecotoxicology and environmental safety* 135:225-235. <https://doi.org/10.1016/j.ecoenv.2016.10.003>. (NAAS: 9.13).

10. Most significant research achievements / Technologies:

- Identified the rice resistant lines against rice root-knot nematode, *Meloidogyne graminicola*.
- Established an *in vitro* culture system for *Heterodera sacchari* on Nipponbare rice in pluronic gel.
- Identified CLE genes responsible for host specificity in *Heterodera sacchari* nematode infecting rice.
- Identified 3mM ZnCl₂ solution as hatching stimulant for *Heterodera sacchari* cysts.

11. Important Award/ Honour/ Recognition:

1. **Junior Research Fellowship (JRF)** for M. Sc. degree (2008-2010) from Indian Council of Agricultural Research (ICAR), New Delhi.
2. **Best oral presentation** award during AZRA silver jubilee international conference at NRRI, Cuttack during 16 to 18 February, 2014.
3. **ICAR Netaji Subhas International fellowship** for pursuing Ph.D. studies at University of Bonn, Germany (2015-2018).
4. **Royal Society award of International Exchange** for pursuing part of the Ph.D. work at James Hutton Institute, Dundee, Scotland from 01/03/2016 to 28/02/2018.
5. **Travel grant from the University of Bonn** for participation in the symposium organized by European Society of Nematologist at University of Ghent, Belgium from 9th to 13th September, 2018.