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9. Funding Agency: **DST - ODISHA**
10. Date of commencement of Fellowship: **1-08-2016**
11. Period of Fellowship: **3 years.**
12. Title of the Research Work: **Combinational use of Neem extract & cyanobacteria for their use as biofertilizer & pest management: an ecofriendly approach.**
13. Name of the Guide/Co-Guide **Dr. Binata Nayak.**
14. Registration Number: **—**

15. A Brief Abstract of your Research Work (Within 200 words):

16. Status of Research Work:

- (a) Writing the synopsis
- (b) Review of Literature
- (c) Data Collection
- (d) Data Analysis
- (e) Writing the draft thesis

17. Do you have your profile in the following research networks?

- (a) Google Scholar
- (b) ResearchGate
- (c) Academia

18. Do you access the following e-resources subscribed by the university

- (a) E-Sodh Sindhu from INFLIBNET
- (b) ProQuest

19. Number of Papers published in referred journals with ISSN: **Two, IJEAAB - ISSN no - 2456 - 1878**

20. Mention any TWO of your best publications in APA standard:

Countersigned by the Research Supervisor
Dr. Binata Nayak
Principal Investigator
DST (O) Project
School of Life Science

Signature of the Research Scholar

Preeti Acharya

ABSTRACT:

An eco-sustainable revolutionary approach is in a demand to meet the gap between population explosion and food demand. A combinational use of biopesticide (Neem extract) and nitrogen fertilizer has been taken care of to decrease the crop loss due to pest along with maintenance of natural fertility of soil. Cyanobacteria have proven potentiality as the source of food, organic fertilizer, fuel, medicine but due to unconventional agricultural practices like continual use of pesticide and chemical fertilizer reduce its growth rate. At the same time, the natural pesticide like neem based product play a vital role in pest management. The objective is to find out the standard solution in present problem to maintain proper nutrient balance of soil, by combining neem extract and neem tolerant cyanobacteria as Biofertilizer and Biopesticide. Carry out the outdoor application of neem and cyanobacterial inoculum to the potted rice plant soil to study the agronomic potential of rice plant in order of panicle length, grain yield and number.

Preeti Acharya