



ENLIGHTENMENT TO PERFECTION

Department of Biotechnology

UNIVERSITY OF NORTH BENGAL

Accredited by NAAC with Grade 'A'

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TO WHOM IT MAY CONCERN

*This is to certify that Mr. Bhusan Gurung has worked under my supervision at the Department of Biotechnology, University of North Bengal and under the co-supervision of Dr. Pardeep Kumar Bhardwaj, IBSD, Sikkim Centre. His thesis entitled "**Cloning and characterization of genes involved in biosynthesis of ginsenosides from *Panax sokpayensis* Shiva K. Sharma & Pandit**" is based on his original work and is being submitted for the award of degree of Doctor of Philosophy (Science) in Biotechnology in accordance with the rules and regulation of the University of North Bengal. This thesis or any part thereof has not been submitted for any other degree/diploma either to this or other University.*

Dipanwita Saha 19/07/2018
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(Dipanwita Saha)
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TO WHOM IT MAY CONCERN

This is to certify that the thesis entitled, “**Cloning and characterization of genes involved in biosynthesis of ginsenosides from *Panax sokpayensis* Shive K. Sharma & Pandit**” submitted by Mr. Bhusan Gurung for the award of the degree of Doctor of Philosophy in Biotechnology is based on the results of experiments carried out by him. He has worked under my supervision (Co-Supervisor) at IBSD, Sikkim Centre, Gangtok and under the supervision of Dr. Dipanwita Saha (Supervisor), Department of Biotechnology, University of North Bengal. I am forwarding his thesis for the Ph. D. degree (Science) in Biotechnology in accordance the rules and regulations of the University of North Bengal. This thesis or any part thereof has not been submitted for any other degree/Diploma either to this or other University.

(Pardeep Kumar Bhardwaj)

·Co-Supervisor

Urkund Analysis Result

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Sources included in the report:

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Instances where selected sources appear:

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