Declaration

*I, **Satyajit Sarkar**, hereby affirm that the research presented in my doctoral thesis titled "**Chemical Characterization of CTC Tea Waste and its Management in West Bengal, India**" was conducted under the supervision of **Prof. (Dr.) Monoranjan Chowdhury**, Professor in the Department of Botany at the University of North Bengal and co-supervised by **Dr. Saurabh Chakraborti**, Additional Director of Public Instruction (Planning & Statistics), Education Directorate, Govt. of West Bengal. I further confirm that neither this thesis nor any portion of it has been submitted for any other academic degree or diploma, whether at this university or any other institution.*

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*This is to certify that the thesis entitled, "**Chemical Characterization of CTC Tea Waste and its Management in West Bengal, India**" submitted by **Mr. Satyajit Sarkar** in fulfillment of the requirements for the degree of Doctor of Philosophy (Ph.D.) in Botany, is based on original research conducted by him. He conducted his research under my guidance at the Department of Botany, University of North Bengal.*

I hereby recommend the submission of his thesis for the Ph.D. degree in Botany at the University of North Bengal. He has successfully met all the stipulated requirements in accordance with the university's regulations pertaining to the research embodied in his thesis. Furthermore, I confirm that this thesis, in its entirety or any of its constituent parts, has not been submitted for the award of any other degree or diploma, either at this university or any other institution.

He has displayed commendable moral character throughout his academic journey and I extend my best wishes for his future endeavors.

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It is certified that the work contained in the thesis titled **"Chemical Characterization of CTC Tea waste and its Management in West Bengal, India"** by **Mr. Satyajit Sarkar** has been carried out following University guideline and it has been approved by the members present in the meeting of the Departmental Research Committee in Botany for processing by the Board of Research Studies.

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Date: 1st October, 2024

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Dedicated to the

Tea Industry in India

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