PREFACE

I joined Dr. Ghosh’s lab at Department of Biotechnology, University of North Bengal in August 2007. Here, I interacted routinely with lots of experiments and tried to take a tangential taste of intermingled problems of biological science, especially plants. Living beings are fast reactive because when a seed is left in the environment, it interacts with moisture, air, light and enzymatic thunderings inside it gives root and shoot outside. On the other hand, plants are authorized by nature in this universe to trap solar energy and supply it to us; so we can call them, Almighty in terms of energy. In spite of adverse conditions, they survive for years at the same place due to cellular brilliancy of stress management, unfortunately they are also caught by stresses at times. Similarly, the work was also perturbing and stressful for me, though I was not sessile like plants. Anyway, I enjoyed the job and it’s my pleasure to have the opportunity to express my gratitude to all of them who assisted me.

I am highly grateful to my supervisor Dr. Shilpi Ghosh, Assistant Professor, Department of Biotechnology, North Bengal University, by whose grace I completed my research work successfully. It gives me immense pleasure to express my indebtedness to her for giving valuable suggestions and constant guidance during the entire course of study. It was not possible to complete this journey without her guidance. It is difficult for me to write in few words my gratitude towards her.

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The victory really becomes more pleasurable when you strike the target in very tough situations. Anyway, the moment becomes truly exceptional, when, imaginings turn into reality.

Kamal Krishna Singh