

## APPENDIX A: List of Publications

- Chakraborty BN, Chakraborty U, Barman S and Roy S.** Effect of different substrates and casing materials on growth and yield of *Calocybe indica* (P&C) in North Bengal, India. *J Appl Nat. Sci.* **8 (2):** 683 - 690 (2016)
- Roy S, Chakraborty BN, Barman S and Chakraborty U.** Production of *Pleurotus ostreatus* Grown in Different Substrates and Evaluation of Spent Substrate as Organic Manure for Growth Improvement of *Capsicum chinense* Jacq. *J. Mycol Plant Pathol*, **45(3):** 267-272; 2015.
- Roy S, Barman S, Chakraborty U and Chakraborty BN.** Evaluation of Spent Mushroom Substrate as biofertilizer for growth improvement of *Capsicum annum* L. *J Appl Biol Biotechnol* **3 (3):**022-027, 2015.
- Roy S, Barman S, Chakraborty U and Chakraborty BN.** Cultivation of *Pleurotus djamor* - a new species of oyster mushroom in North Bengal. *J. Mycopathol. Res.* **53(1):** 59-63, 2015.
- Barman S, Roy S, U. Chakraborty and Chakraborty BN.** Cultivation practices of *Calocybe indica* (P & C) and use of spent mushroom substrate for leafy vegetables in North Bengal. *Global J Biosci Biotechnol.***4(1):** 74-80, 2015.
- Roy S, Barman S, Chakraborty U and Chakraborty BN.** Development of an easy and efficient technique for cultivation of different species of *Pleurotus*. *NBU J Pl Sci.* **8(1):**13-18; 2014.
- Roy S, Sunar K, De U and Chakraborty BN.** Influence of Selective Bioresources on Seedling Vigour and Growth of *Cicer arietinum* L. in Field Conditions. *Adv. Crop Sci.* **3(10):** 663-670, 2013.

## APPENDIX B: List of Abbreviations

APS- Ammonium per sulphate  
BLAST- Basic local alignment search tool  
BSA- Bovine serum albumin  
BSS-2- Biclinal seed stock- 2  
Ca<sub>3</sub>(PO<sub>4</sub>)<sub>2</sub> - Tri-calcium phosphate  
CaHPO<sub>4</sub> - Calcium phosphate  
CAS- Chrome azurol S  
CAT- Catalase  
CDA- Chitinase detection agar  
cfu- Colony forming unit  
CHT- Chitinase  
CuSO<sub>4</sub>- Copper sulphate  
DAC-ELISA- Direct antigen coating- Enzyme linked immune-sorbent assay  
DAPG- 2,4-Diacetylphloroglucinol  
dATP- Deoxy adenosine tri-phosphate  
dCTP- Deoxy cytosine tri-phosphate  
DEAE cellulose- diethyl aminoethyl cellulose  
dGTP- Deoxy guanosine tri-phosphate  
DMAB- Di methyl amino benzaldehyde  
DNA- Deoxyribonucleic acid  
dNTPs- Deoxy nucleotide tri-phosphates  
DNSA- Dinitro salicylic acid  
dTTP- Deoxy thymidine tri- phosphate  
EDTA- Ethylene diamine tetra acetic acid  
g- gram  
Gfp- Green fluorescent protein  
HCl- Hydrochloric acid  
HCN- Hydrocyanic acid  
HPLC- High performance liquid chromatography  
MEGA 4- Molecular Evolutionary Genetics Analysis 4  
mg- Mili gram  
ml- Mili litre  
Na<sub>2</sub>CO<sub>3</sub>- Sodium carbonate  
NaN<sub>3</sub>- Sodium azide  
NaNO<sub>2</sub>- Sodium nitrite  
NaOH- Sodium Hydroxide  
NB- Nutrient Broth  
NCBI- National Center for Biotechnology Information  
NCM- Nitrocellulose membrane  
NH<sub>4</sub>Cl- Ammonium chloride  
PAL- Phenylalanine ammonia lyase  
PBS-Tween- Phosphate buffer saline- Tween  
PCA- Phenazine-1-carboxylic acid  
PCI- Water saturated phenol: Chloroform: Isoamyl alcohol  
PCR- Polymerase chain reaction  
SDS- Sodium dodecyl sulphate  
SDS-PAGE- Sodium dodecyl sulphate- Poly-acrylamide gel electrophoresis  
STZ- Streptozotocin

TE buffer- Tris-EDTA buffer  
TEMED- N,N,N',N'-Tetramethylethylenediamine  
Tris Hcl- Tris hydrochloric acid  
TV- Toklai variety  
UP- Upasi variety  
UPGMA- Unweighted Pair Group Method with Arithmetic Mean  
yr- Year

## APPENDIX C: List of Chemicals

Ammonium chloride  
Ammonium per sulphate  
Bovine serum albumin  
Calcium phosphate  
Calcium carbonate  
Calcium Sulphate  
Carboxy methyl cellulose  
Chrome azurol S  
Colloidal chitin  
Copper sulphate  
Deoxy nucleotide tri-phosphates  
Di methyl amino benzaldehyde  
Di sodium hydrogen phosphate  
Diethyl aminoethyl cellulose  
Dinitro salicylic acid  
Ethylene diamine tetra acetic acid  
Ferric chloride  
Fluorescein isothiocyanate  
Helicase (3%)  
Hexa-decytrimethyl ammonium bromide  
Hydrochloric acid  
Hydrocyanic acid  
Hydrogen peroxide  
Indole acetic acid  
O-dianisidine (5 mg/ml methanol)  
p- nitrophenyl phosphate  
Phosphate buffer saline- Tween  
Poly vinyl- pyrrolidone  
Potassium chloride  
Sodium azide  
Sodium carbonate  
Sodium dodecyl sulphate  
Sodium Hydroxide  
Sodium molybdate  
Sodium nitrite  
Streptozotocin  
Sulphuric acid  
Tri-calcium phosphate  
Tris Acetic Acid and EDTA buffer  
Tris hydrochloric acid  
Tris-EDTA buffer  
Water saturated phenol: Chloroform: Isoamyl alcohol  
0.3mM borate buffer (pH 8.0)  
1 M K-PO<sub>4</sub> buffer (pH 7.1)  
1M Na-acetate buffer (pH 4)  
2 mM β- mercaptoethanol  
1 M Na-borate buffer (pH 9.8)  
30%-90% absolute alcohol