Curriculum Vitae of Dr. Anil Chandra Deb

1. Personal Information

d. Date of Birth

- a. Name in Full : First Name: ANIL Middle Name: CHANDRA Last Name: DEB
- b. Mailing Address : Professor, Department of Genetic Engineering and Biotechnology University of Rajshahi, Rajshahi – 6205, Bangladesh
- c. E-mail Address : anil_deb2001@yahoo.com; debac@ru.ac.bd
 - : December 2, 1967
- e. Marital Status : Married
- f. Nationality : Bangladeshi by Birth
- g. Religion : Hindu (Sanatan)
- h. Join in University : 25.10.1998 as Lecturer, Department of Genetic Engineering and Biotechnology, University of Rajshahi, Rajshahi-6205, Bangladesh. i. Homepage : http://103.79.117.242/ru_profile/public/teacher/23501320/profile

2. Education/Degree Obtained:

S.S.C. in Science Group, Atwari Pilot High School, Rajshahi Education Board, 1984.

H.S.C. in Science Group, Carmichael College Rangpur, Rajshahi Education Board, 1986.

B.Sc. Honours in Botany, University of Rajshahi, Bangladesh, 1989; Minor Field: Chemistry and Statistics.

M.Sc. in Genetics (Thesis Group), University of Rajshahi, Bangladesh, 1990; Major Field: Cytogenetics, Molecular Genetics, Biometrical Genetics, Plant Breeding and Population Genetics.

Ph.D. University of Rajshahi, Bangladesh, 2003 on Biometrical Genetics.

3. Position Hold:

| a. Teaching | | |
|---------------------|---|---|
| Lecturer | : | From 25-10-1998 to 24-10-2001, University of Rajshahi, Bangladesh |
| Assistant Professor | : | From 25-10-2001 to 26-02-2006, University of Rajshahi, Bangladesh |
| Associate Professor | : | From 27-02-2006 to 20.01.2011, University of Rajshahi, Bangladesh |
| Professor | : | From 21.01.2011 till to date. University of Raishahi. Bangladesh |

- **b.** Chairman, Department of Genetic Engineering and Biotechnology, University of Rajshahi, Rajshahi-6205, Bangladesh, from 23-07-2011 to 22-07-2014.
- c. Provost, Shaheed Ziaur Rahman Hall, University of Rajshahi, Rajshahi-6205, Bangladesh, from 12-04-2015 to 09-04-2018.
- d. Working as Reviewer of "Journal of Plant Sciences (JPS)". http://www.sciencepublishinggroup.com/j/jps
- e. Working as Editorial and Advisory Board Member for the Journal "Current Research in Agriculture and Farming". www.agrifarming.org
- f. Working as Associate Editorial of "American Journal of Pure and Applied Biosciences". https://universepg.com/journal/ajpab
- g. Working as Executive Editor of Bangladesh Journal of Genetics and Biotechnology.
- h. Working as General Secretary of Genetical Society of Bangladesh.
- 4. Skill:

Experimental design, Trial (Field & Laboratory), Plant hybridization, Data analysis (Application through various Biometrical model) and Computing (Fortran-77, Basic and MS-Word).

5. Experience:

a. Teaching (Altogether 22 + years and Course offer): Biometrical genetics, Biostatistics, Basic genetics and Plant breeding, Population genetics, Cell biology & Cytogenetics, Plant tissue culture, Agricultural extension education and Computer application (Both theoretical & practical) at under-graduate and post-graduate level.

b. Research:

I. Carried out Research on Diversity and Genotype-Environment Interaction of Yield and Yield Components in Chilli at Post-graduate Level.

II. Carried out Research on Genetic Control, Selection Index and Genotype-Environment Interaction of yield Components in Chickpea at Ph.D. Level.

III. Supervised a Number of M. Sc. Thesis in the Department of Genetics Engineering and Biotechnology, University of Rajshahi, Bangladesh.

IV. Supervised 2 M.Phil. and 5 Ph.D. Thesis in the Department of Genetics Engineering and Biotechnology, University of Rajshahi, Bangladesh.

c. Project:

I. Worked as Research Assistant in a Project of Ministry of Science and Technology, Bangladesh on chickpea from 1995-1996 and 1996-1997.

II. Worked as a Project Director from 1999-2000 on Anther Culture in Chilli, Financed by University of Rajshahi, Bangladesh.

III. Worked as a Project Director in 2003 on Genetic Study and Discriminant Function Selection of Root Nodule, Yield and Yield Components in Blackgram, Financed by University of Rajshahi, Bangladesh.

IV. Worked as a Project Director from 01.10.2011 to 30.09.2012 on Study of Genetic Divergence, Selection Index and Genotype × Environment Interaction in Lentil, Financed by the University Grants Commission (UGC) of Bangladesh.

V. Working as Project Director from 2020 on Functional Analysis of Rice RecQ Genes to Determine their Relevance in Abiotic Stress Tolerance, Financed by Ministry of Science and Technology, Bangladesh.

VI. Working as Project Director from 2020 on *In-Silico* Analysis of RECQ Gene Family and their Expression Profiles Under Different Abiotic Stresses in Tomato, Financed by University of Rajshahi, Bangladesh.

6. International Research ID:

I. ORCID: https://orcid.org/0000-0002-9574-1041

II. Scopus Author ID: 57213581258

III. Web of Science Researcher ID: AAS-6174-2020

7. Research Interest:

My research interest is to study the quantitative characters of a population obtained through breeding procedures and evaluating their inheritance pattern by applying biometrical genetic methodology and also study of their genetic control at the molecular level.

8. Scholarship:

Bangladesh Ministry of Science & Information and Communication Technology in 1995-1996 and 1996-1997.

9. List of Publications:

Book: "Biometrical Techniques of Quantitative Traits", Published by the LAP LAMBERT Academic Publishing GmbH & Co.KG, Germany. 16 June, 2012. www.lap-publishing.com, www.amazon.com, <u>https://www.amazon.com/Biometrical-Techniques-Quantitative-Traits-Analysis/dp/3659149888</u>

a. Full Papers:

I. A.C. Deb, J. Golder and M.A. Khaleque 1996. Diversity and genotype-environment interaction of heading date and some of the morphological characters in chilli (*Capsicum annuum* L.). Proceedings of the 8th International Botanical Conference, December 12-13, 1994. Bangladesh Botanical Society, Dhaka University, Bangladesh. Page 95–101.

II. M.A. Islam, **A.C. Deb**, and M.A. Khaleque 2000. Diallel analysis of yield and yield components in chilli (*Capsicum annuum* L.). Bangladesh J. Genet. Biotech. 1(1): 15–20.

III. I. Ahmed, M.A. Islam, **A.C. De**b, and M.A. Khaleque 2000. Inheritance of heading dates in seven-parent diallel cross of chilli (*Capsicum annuum* L.). Bangladesh J. Genet. Biotech. 1(1): 35–40.

IV. M.A. Islam, **A.C. Deb** and M.A. Khaleque 2000. Genotype-environment interaction of germination in chickpea (*Cicer arietinum* L.). Bangladesh J. Genet. Biotech. 1(1): 47–53.

V. A.S.M. Hasanuzzaman, A.C. Deb and O.I. Joarder 2000. Gene and genotype frequency of blood groups in different tribal races in Bangladesh. Bangladesh J. Genet. Biotech. 1(1): 93–97.

VI. M.O.Goni, A.C. Deb, M.A. Islam and M.A. Khaleque 2000. Study of heritability, genetic advance and variability in some senotypes of blackgram [*Vigna mungo* (L.) Hepper]. J. Bio-Sci. 8: 101–105.

VII. M.A. Islam, A.C. Deb, M.O.Goni, M. Aminul Islam and M.A. Khaleque 2001. Diversity estimate in lentil (*Lens culinaris* Medic.). Bangladesh J. Genet. Biotechnol. 2(1&2): 29–33.

VIII. M.G. Shroar, M.O. Goni, M.A. Islam, A.C. Deb, and M.A. Khaleque 2001. Study of genetic diversity on some quantitative characters in blackgram [*Vigna mungo* (L.) Hepper]. J. Bio-Sci. 9: 15–19.

IX. M.A. Islam, **A.C. Deb and** M.A. Khaleque 2002. Genotype-environment interaction of yield and some of the yield components in lentil (*Lens culinaris* Medic.). Bangladesh J. Genet. Biotechnol. 3(1&2): 17–19.

X. M.T Islam, M.A. Islam, A.C. Deb and M.A. Khaleque 2003. Study of stability parameter regarding irrigation treatment on some yield components in chickpea (*Cicer arietinum* L.). Bangladesh J. Genet. Biotechnol. 4(1&2): 19–22.

XI. M.A. Islam, A.C. Deb and M.A. Khaleque 2004. Comparison genotype-environment interaction models and selection of stable genotypes in chilli (*Capsicum annuum* L.). Bangladesh J. Genet. Biotechnol. 5(1&2): 9–13.

XII. A.C. Deb and M.A. Khaleque 2004. Study of genetic diversity of some of the yield and yield contributing characters in chickpea (*Cicer arietinum* L.). J. Sci. Foundation . 2(2): 77–82.

XIII. M.S. Islam, M. Rahman, A.C. Deb, M.A Islam and M.A. Khaleque 2005. Factorial analysis in some of the agronomic characters of blackgram [*Vigna mungo* (L.) Hepper]. J. Sci. Foundation . 3(1): 131–136.

XIV. A.C. Deb and M.A. Khlaleque 2005. Path co-efficient analysis of yield and yield components in chickpea (Cicer arietinum L.). Indian Agric. 49(3&4): 267–276.

XV. M.G. Sharoar, **A.C. Deb** and M.A. Khaleque 2006. Effect of different doses of fertilizers at different ages on some root characters, nodules and yield components in blackgram [*Vigna mungo* (L.) Hepper]. Asian Journal of Plant Sciences. 5(4): 717–720.

XVI. N. Sarker, and **A.C. Deb** 2006. Correlation and path-coefficient analysis in some yield and yield contributing characters in blackgram [*Vigna mungo* (L.) Heppper]. Bangladesh J. genet. biotechnol. 7(1&2): 19–23.

XVII. M.A. Pervin, M.F.M.B. Polash, S.M. Rahman, and A.C. Deb 2007. Study of genetic variability and G×E interaction of some quantitative traits in blackgram [*Vigna Mungo* (L.) Hepper]. Journal of Biological Sciences. 7 (1):169–175. DOI: 10.3923/jbs.2007.169.175

XVIII. A.C. Deb and M.A. Khlaleque 2007. Study of discriminant function selection in chickpea (*Cicer arietinum* L.). Indian Biologist, 39(1): 51–60.

XIX. M. Khalekuzzaman, A.C. Deb, M R. Islam and M.A. Jahan 2007. Study of genetic variation, association and path analysis in maize (*Zea mays* L.). Intl. J. BioRes. 2 (4): 15–19.

XX. M.A.K. Azad, **A.C. Deb** and M.A. Khlaleque 2008. Genotype-environment interaction and stability of yield and some of the yield contributing characters in lentil (*Lens culinaris* Medic.). Plant Environ. Dev. 2 (2): 93–99.

XXI. M.O. Goni, **A.C. Deb** and M.A. Khaleque 2008. Variability study and evaluation of the relationship among root nodule, yield and nodule bacteria in respect of biochemical characters in blackgram [*Vigna mungo* (L.) Hepper]. Proceedings of the 4th International Fruit Legume Research Conference (IFLRC-IV), October 18-22, 2005 New Delhi, India. Page 270–280.

XXII. A.C. Deb and M.A. Khlaleque 2009. Nature of gene action of some quantitative traits in chickpea (*Cicer arietinum* L.). World J. Agric. Sci., 5(3): 361–368.

XXIII. M.A. Samad, A.C. Deb, R. Basori and M.A. Khaleque 2009. Study of genetic control of soluble protein in root nodules and seeds in blackgram [*Vigna mungo* (I.) Hepper]. Int. J. Sustain. Crop Prod. 4(5): 05–08.

XXIV. M.A.K. Azad, **A.C. Deb** and M.A. Khlaleque 2009. Test of homogeneity and genotype-environment interaction due to spacing in lentil (*Lens culinaris* Medic.). J. Subtrop. Agric. Res. Dev. 7(4): 705–709.

XXV. A.K. Dutta, R. Ferdushi, **A.C. Deb** and M.A. Khaleque 2009. Joint regression analysis of twelve agronomical characters to evaluate stable lines in lentil (*Lens culinaris* Medic.). Bangladesh J. Sci. Res. 22(1&2): 71–82.

XXVI. M.M. Husain, A.C. Deb, M.A. Khlaleque and O.I. Joarder 2009. Inheritance study of yield and yield components using biparental progenies (BIPs) in chilli (*Capsicum annuum* L.). Intl. J. BioRes. 2(12): 11–16.

XXVII. N. Sarker and **A.C. Deb** 2009. Variability and the implication of discriminant function for selection in blackgram [*Vigna mungo* (L.) Hepper]. J. Bangladesh Soc. Agric. Sci. Technol. 6 (1&2): 191–196.

XXVIII. R. Alam, **A.C. Deb**, M.A. Mannan and M. A. Khaleque 2011. Inheritance study of seven quantitative characters using Northe Carolina Design in sugarcane. Pakistan Sugar Journal 26(4): 12 – 20.

XXIX. A.C. Deb, A.K. Dutta and M.A. Khaleque 2009. Correlation and path coefficient analysis in lentil (Lens culinaris Medic). J. Sher-e-Bangla Agric. Univ. 3(2): 24–29.

XXX. A.K. Dutta, **A.C. Deb**, R.Ferdushi and M.A. Khaleque 2010. Genetic variability for yield contribution characters in some Irradiated Lentil (*Lens culinaris* Medic.) Genotypes. J. Subtrop. Agric. Res. Dev. 8(1): 759–765.

XXXI. K. Nahar, A. C. Deb, M. A. Samad and M. A. Khaleque 2010. Genetic study of some agronomical traits through single cross analysis in blackgram [*Vigna mungo* (L.) Hepper]. Int. J. Sustain. Crop Prod. 5(3): 22–28.

XXXII. R. Alam, **A.C. Deb** and M.A. Khaleque, 2010. Genotype-environment interaction of some agronomical characters of sugarcane genotypes. Indian Sugar, 60(2): 45–50.

XXXIII. A.K. Azad, **A.C. Deb**, and M.A. Khaleque 2011. Variability and diversity estimates of yield and yield contributing characters in lentil (*Lens culinaris* Medic). Journal of Biodiversity and Environmental Sciences (JBES). 1(1): 35–50.

XXXIV. R. Basori, M.A. Samad, A.C. Deb, and M.A. Khaleque 2011. Diallel analysis of soluble protein in root nodules and seeds in blackgram [*Vigna mungo* (L.) Hepper]. Journal of Biodiversity and Environmental Sciences (JBES). 1(2): 7–15. DOI: 10.6084/M9.FIGSHARE.1615064.V1

XXXV. R. Ara, M. A. Khaleque and **A. C. Deb** 2011. Gene action of bulb yield contributing characters in onion (*Allium cepa* L.). Indian Biologist, 43(1&2): 63–73.

XXXVI. R Alam, **A.C. Deb** and M.A. Khaleque 2012. Diversity estimates of ten crosses of sugarcane (*Saccharum officinarum* L.) hybrids following North Carolina Design-I. Journal of Sugarcane Research, 2(2): 41–47.

XXXVII. M.T. Hasan and **A.C. Deb** 2013. Genetic variability and correlation study in chickpea (*Cicer arietinum* L.). Int. J. Sustain. Agril. Tech. 9(1): 08–11.

XXXVIII. R Alam, **A.C. Deb** and M.A. Khaleque 2013. Joint regression analysis of some quantitative characters of F₁ sugarcane genotypes. International Journal of Plant Breeding, 7(2): 141–144.

XXXIX. N. Sarker, M.A. Samad, A.K. Azad and A.C. Deb 2013. Selection for better attributes through variability and discriminant function analysis in chickpea (*Cicer Arietinum* L.). J. Subtrop. Agric. Res. Dev.11 (1):1050–1055.

XXXX. M.A. Samad, N. Sarker, J.K. Sarker, A.K. Azad and A.C. Deb 2013. Assessment of variability in twenty-four lines of blackgram (*Vigna mungo* L.). Int. J. Biosci., 3(8): 307–312. DOI: <u>http://dx.doi.org/10.12692/ijb/3.8.307-312</u>

XXXXI. M.H. Madina, M.E. Haque, A.K. Dutta, M.A. Islam, **A.C. Deb** and B. Sikdar 2013. Estimation of genetic diversity in six lentil (*Lens culinaris* Medik) varieties using morphological and biochemical markers. International Journal of Scientific & Engineering Research 4(9): 819–825.

XXXXII. M.T. Hasan and **A.C. Deb** 2013. Inheritance of double flower per peduncle and flower colour in chickpea (*Cicer arietinum* L.). Electronic Journal of Plant Breeding, 4(3): 1228–1231.

XXXXIII. M.T. Hasan and **A.C. Deb** 2013. Inheritance study of flower color in chickpea (*Cicer arietinum* L.). Indian J. Agric. Res., 47(5): 445–448.

XXXXIV. A.F.M.M. Haque, M.A. Samad, N. Sarker, J.K. Sarker, A.K. Azad, A.C. Deb 2013. Gene effects of some agronomic traits through single cross analysis in blackgram (Vigna mungo L. Hepper). Int. J. Biosci. 3(6): 220 – 225. DOI: <u>http://dx.doi.org/10.12692/ijb/3.6.220-225</u>

XXXXV. N. Sarker, M.A. Samad and **A.C. Deb** 2014. Study of genetic association and direct and indirect effects among yield and yield contributing traits in chickpea. RRJBS, 3(2): 32–38.

XXXXVI. M.T. Hasan and **A.C. Deb** 2014. Estimates of direct and indirect effects between yield and yield components and selection indices in chickpea (*Cicer arietinum* L.). Tropical Plant Research, 1(2): 65–72.

XXXXVII. M.A. Samad, N. Sarker and **A.C. Deb** 2014. Study on relationship and selection index in chickpea. Tropical Plant Research, 1(3): 27–35.

XXXXVIII. M.A. Samad, N. Sarker A.K. Azad and **A.C. Deb** 2014. Variability, heritability and genetic advance of some quantitative traits in chickpea (*Cicer arietinum* L.). Rajshahi Univ. j. life earth agric. sci., 42: 23–31.

XXXXIX. M.H. Madina, M.S. Rahman, **A.C. Deb**, Yun Hee Choi, Mi Ri Kim, Jihoon Shin, and Jin Cheol Yoo 2015. Polymorphism assessment of six lentil (*Lens culinaris* Medik.) genotypes using isozyme. J. Chosun Natural Sci., 8(2): 117–127. DOI: <u>http://dx.doi.org/10.13160/ricns.2015.8.2.117</u>

XXXXX. M.A. Samad, N. Sarker and **A.C. Deb** 2016. Generation mean analysis of quantitative traits in chickpea. Bangladesh J. Bot. 45(2): 277–281.

XXXXXI. A. R. Chowdhury and **A.C. Deb** 2016. Study of combining ability and components of variation of yield of some lentil lines. J. Life Earth Sci. 11: 23–30.

XXXXXII. M.T. Hasan and A. C. Deb 2017. Assessment of genetic variability, heritability, character association and selection index in Chickpea (*Cicer arietinum* L.). Int. J. Biosci. 10(2): 111–129. DOI: <u>http://dx.doi.org/10.12692/ijb/10.2.111-129</u>

XXXXXIII. M.T. Hasan and **A.C. Deb** 2017. Stability analysis of yield and yield components in chickpea (*Cicer arietinum* L.). Horticulture Int J 1(1): 1 – 12. doi: <u>10.15406/hij.2017.01.00002</u>

XXXXXIV. R.F. Rahman and A.C. Deb 2018. Detection of stable genotypes through genotype × environment (G×E) analysis in Silkworm (Bombyx mori L.). Bangladesh j. entomol. 28(2): 51–61.

XXXXXV. A.C. Deb 2020. Genetic pattern analysis of some quantitative traits in lentil (*Lens culinaris* Medic.). Vegetos, 33(3): 580-591. doi: <u>https://doi.org/10.1007/s42535-020-00142-5</u>

XXXXXVI. R. F. Rahman and **A. C. Deb** 2020. Critical analysis of correlation and direct and indirect effects of some economic characters in silkworm (*Bombyx mori* L.). Curr. Rese. Agri. Far. 1(4): 1-8. doi: http://dx.doi.org/10.18782/2582-7146.112

XXXXXVII. R Ara and **AC Deb** 2021. Combining ability and gene action of four seed yield contributing characters in onion (*Allium cepa* L.). International Journal of Chemical Studies, 9(1): 1-7. doi:: <u>https://doi.org/10.22271/chemi.2021.v9.i1a.11189</u>

b. Accepted Papers:

- I. A. R. Chowdhury, A. C. Deb, M. A. Khaleque and N. Absar Responses of irradiation on yield and yield contributing characters and amino acid content of some lentil lines. Molecular Biology and Biotechnology Journal.
- II. S. B Chhabi, A. C Deb and O. I Joarder. Genotype-environment interaction shown by coleoptile length germinated under different range of temperature in wheat, *Triticum aestivum* L. em . Thell. Molecular Biology and Biotechnology Journal.

c. Short Communications:

I. S.M. Banu, M.A.K. Azad, A.C. Deb, and M.A. Khaleque 2000. Estimate of Genetic Variability and Heritability in Lentil (*Lensc culinaris* Medic.). J. Bio-Sci. 8: 7-10.

II. S. Parvin, N.K. Sana, K.K. Biswas, A.C. Deb, B. Sikder and R.K. Saha 2001. Degradation of Seed Storage Substances of Lablab Bean Seeds During Germination. Bangladesh J. Genet. Biotechnol. 2(1&2): 147-150.

III. M. Aminul Islam, M.A. Islam, **A.C. Deb**, M.A. Khaleque and O.I. Joarder 2001. Callus Induction Through Anther Culture Techniques in Different Varieties of Chilli (*Capsicum annuum* L.). Bangladesh J. Genet. Biotechnol. **2(1&2)**: 159-161.

IV. A.S.M Hasanuzzaman, **A.C. Deb and O.I.** Joarder 2003. Clinical Features and Regimens of Treatment of Kala-Azar with Sodium Stibogluconate – A Study of 24 Pediatric Cases in Rajshahi (Bangladesh). Bangladesh J. Genet. Biotechnol. **2(1&2)**: 73-74.

d. Abstracts:

- I. Factorial Analysis and Stability in Some of the Shoot Characters and Root Weight in Blackgram [*Vigna mungo* (L.) Hepper]. Publ. in Programme and Abstract, Annual Bot. Conf., 12 January 2002. Rajshahi, Bangladesh. Page 8.
- II. Variability Study and Evaluation of the Relationship among Root Nodule, Yield and Nodule Bacteria in Respect of Biochemical Characters in Blackgram [*Vigna mungo* (L.) Hepper]. Publ. in Abstract, 4th International Food Legumes Research Conf., 18-22 October 2005, IARI, New Delhi, India. Page 66.
- **III.** Study of Discriminant Function Selection in Chickpea (*Cicer arietinum* L.). Publ. in Abstract, 4th International Food Legumes Research Conf., 18-22 October 2005, IARI, New Delhi, India. Page 125.

10. Memberships of Learned Society:

Botanical Society of Bangladesh Genetical Society of Bangladesh Bangladesh Association for the Advancement of Science Bangladesh Association for Plant Tissue Culture and Biotechnology Bangladesh Association for Biotechnology & Genetic Engineering

11. Attended Conferences:

1994 - International Botanical Conference, Dhaka University, Bangladesh.

1999 - Annual Botanical Conference, Dhaka University, Bangladesh.

- 1999 First Bangladesh Genetical Conference, Rajshahi University, Bangladesh.
- 2000 Annual Botanical Conference, Chittagong University, Bangladesh.
- 2001- Celebration and Festival on Centenary of the Rediscovery of Mendelism (1900-2000) and Cracking of the Human Genetic Code (2000), Rajshahi University, Bangladesh.
- 2001 Annual Botanical Conference, Rajshahi University, Bangladesh.
- 2002 International Botanical Conference, Dhaka University, Bangladesh.
- 2003 Annual Botanical Conference, Jahangirnagar University, Bangladesh.
- 2005 Fourth International Food Legumes Research Conference (IFLRC-IV), IARI, New Delhi, India.
- 2005 Third International Botanical Conference, Dhaka University, Bangladesh.
- 2007 Annual Botanical Conference, Khulna University, Bangladesh.
- 2008 Annual Botanical Conference, Jahangirnagar University, Bangladesh.
- 2009 Fourth International Botanical Conference, Dhaka University, Bangladesh.
- 2009 Twenty-First Bangladesh Science Conference, BARI, Gazipur, Dhaka, Bangladesh.
- 2010 Annual Botanical Conference, Chittagong University, Bangladesh.
- 2011 International Botanical Conference, Dhaka University, Dhaka, Bangladesh.
- 2012 Annual Botanical Conference, Chittagong University, Bangladesh.
- 2013 Biotechnology Workshop, Bangladesh Agricultural University, Mymensingh.
- 2014 7th Plant Tisuuse Culture and Biotechnology Conference, Dhaka University, Dhaka, Bangladesh.
- 2014 International Botanical Conference, Dhaka University, Dhaka, Bangladesh and so on.

12. Referees:

a. Professor Dr. A. K. M. Rafiul Islam Department of Botany University of Rajshahi Rajshahi-6205, BANGLADESH E-mail: rislamakm@yahoo.com **b.** Professor Dr. B. C. Das Department of Zoology University of Rajshahi Rajshahi-6205, BANGLADESH E-mail: <u>bcdzool@yahoo.com</u>

Azes

(Dr. Anil Chandra Deb) The Applicant