# Curriculum Vitae

• Name: Dr. Tapash Dasgupta

Position: Professor and Dean

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#### **Education**

• Ph.D., Bidhan Chandra Krishi Viswavidyalaya (State Agricultural University), West Bengal, India,1980-1984 (Genetics of *Vigna mungo*) awarded 1984

- M.Sc. (Ag.), Bidhan Chandra Krishi Viswavidyalaya, 1977 (Genetics and Plant Breeding), 1<sup>st</sup> class
- B.Sc. (Agriculture) Hons, Bidhan Chandra Krishi Viswavidyalaya 1975, 1<sup>st</sup> class.

# **Professional Experience**

- Professor, Ramakrishna Mission Vivekananda University, 2017 (April)-continuing
- Professor, University of Calcutta 2012-2017 (March)
- Member, Hybrid Rice Development consortium, IRRI, Las Banos, Philippines and visited Rice field at Las Banos for varietal selection in 2012, 2013 and 2014
- Visiting Fellow, CIRAD, Montepellier, France 2010 for 3 months
- Marie-Curie International Incoming Fellow by European Commission to work at University of Aberdeen, Scotland, UK on molecular breeding 2009-2012.
- Visiting Fellow in Plant Molecular Biology , University of Aberdeen , UK,2003-2004 Reader of Genetics and Plant Breeding , University of Calcutta, April,1995-May,2003 Senior Lecturer (Research) Bidhan Chandra Krishi Viswa vidyalaya (State
- Agricultural University), West Bengal, India 1993-1995
- Asst Wheat Breeder, Bidhan Chandra Krishi Viswa vidyalaya (State Agricultural University, West Bengal, India) 1985-1993
- Post-doctorate Fellow (In service), International Crops Research Institute for semi-arid Tropics (ICRISAT) in 1988-89

- Junior Scientist, Orissa University of Agriculture and Technology, 1984 Assistant Executive, NDDB, Anand, Oil mission, 1984
- Research Officer (Rice), Department of Agriculture, Govt. of West Bengal, 1978-1979

## **Administrative responsibility at Calcutta University**

- Director, Institute of Agricultural Science (2012-15)
- CU Member, Calcutta University Senate (2012-2015)
- Head, Dept. of Genetics and Plant Breeding (2001-2009,2011-2015).
- Head, Dept. of Agricultural Chemistry and Department of Plant Physiology (2012-2015).
- Convener, Ph.D. Committee, Dept. of Genetics and Plant Breeding (2004-16) Member, Ph.D. committee, Dept. of Seed Science and Technology (2004-2017)
- Member, Advisory committee, Dept. of Genetics, Faculty of Science (2009-2013)

# Administrative responsibility at Ramakrishna Mission Vivekananda Educational and Research Institute, Narendrapur Campus

- Dean, IRDM Faculty Centre, RKMVERI Narendrapur Campus (2018-continuing)
- Member, Academic Council, RKMVERI (2018-continuing)
- Member, Executive Council, RKMVERI (2018-continuing)
- Director, Research and Development cell, RKMVERI (2022- ongoing)

#### **Research Interests**

- Breeding high yielding and good cooking quality rice variety and hybrid rice.
- Identifying submergence tolerant lines and submergence QTL utilizing local genetic resources in rice (CU-IRRI- Chinsurah Rice Research Institute).
- Multi-stress tolerant variety development for submergence and BLB tolerance in rice (RKMVERI-NRRI).
- Brown plant hopper and submergence tolerant variety development in rice (RKMVERI-NRRI)
- Development of export quality, high yielding white seeded varieties in sesame
- Breeding charcoal root rot tolerant high seed yield and oil containing lines in sesame.
- Plants adaptation to stress environments (biotic and abiotic) in rice and sesame.
- Vegetable breeding for high yield, molecular characterization of genotypes, QTL mapping in horticultural crops
- Evolving mechanism and types tolerant to Arsenic in rice, sesame and vegetables.
- QTL mapping, linkage map construction and association mapping for desired traits in rice, sesame and vegetables

## **Techniques known**

- Plant Breeding methods include mutation breeding, selection, hybridization, etc. Expert in Biometrical Genetics
- Varietal development for rice, sesame and mustard and horticultural crops, Genomic DNA library construction
- Statistical software Minitab, Mstat, R, Mapmaker, QTL cartographer, Join Map, etc., and PCR and RT PCR, primer design, linkage map construction, QTL mapping Bioinformatics
- Gene silencing in rice

## **PhD** students

- Already supervised 23 scholars as principal supervisor, who have been awarded Ph.D. degree. A scholar is in the final phase of thesis submission.
- Four scholars are working under my supervision in the Ph.D program in rice breeding.

# M.Sc. (Ag.) students

• Guided more than 56 students in M.Sc (Ag.) dissertation work.

#### **Post-doctoral Fellow**

• One fellow completed under DST program, Govt. of India.

## **Current and recently completed projects**

- Directorate of Agriculture, Govt. of West Bengal funded project on" Screening of bread wheat varieties in boron deficient soil of North Bengal" (1991-1994) (Co-PI)
- Dept. of Science & Technology, Govt. of West Bengal funded project with Prof. Pranab Hazra (BCKV) on" Adaptability and improvement of cowpea in West Bengal" (1993-1996) (PI)
- ICAR funded a project on "Screening of cotton germplasms for saline tracts of sunderban" (1994-1997) (Co-PI)
- Dept. of Science & Technology, Govt. of West Bengal funded project on "Genetic Resources of Horse gram: Its collection, evaluation and Improvement" (2001-2004) (PI)
- Permanent Project in Calcutta University funded by State Govt. on "Crop Breeding Research Unit" with 2 fellows and one scientist, 2001- (PI)
- Dept. of Food Processing and Horticulture, Govt. of West Bengal funded project on "Diversity of local germplasms and identification of pure hybrid seeds in okra, chilli, tomato by molecular markers " (2007-2009) (PI)
- BBSRC-DFID (UK) funded International Project with University of Aberdeen and Rothamstad Institute (UK)- Chinesese Academy of Science- Bangladesh Agricultural University on" Arsenic Tolerance mechanism in rice" 2007-2011. (Co-PI)
- Edible Agro, India funded project on "Sesame Improvement" 2008-2011 (PI)

- Department of Science and Technology (W.B.) funded project on" Collection, characterization and genetic improvement of indigenous short grained aromatic rice in west Bengal with special emphasis to cooking qualities and yield."2009-2012. (PI)
- RKVY, Govt. of India mission project, sponsored by Govt. of West Bengal "Screening low arsenic genotypes in paddy, mustard, sesame, lentil and role of phosphates, silica, selenium in arsenic tolerant mechanism " 2009-12. (PI)
- Department of Atomic energy- UGC consortium research funded project on" Radiation induced mutation of wheat seeded sesame for developing early duration high yielding lines adaptable to agro-climatic condition of West Bengal" 2009-2013. (PI)
- University Grant Commission sponsored major project on "Genetic divergence among genotypes and linkage map construction in sesame" 2012-2016. (PI)
- All India Coordinated Research Program on Sesame and Niger (ICAR), Net Work Program having 3 scientists positions and 3 technical staff. It has been allotted to us by ICAR in 2015 for our outstanding performance in sesame breeding. (Principal Investigator)
- Hybrid Rice Consortium Partner, International Rice Research Institute, Manila, Philippines from 2015-onwards.
- Department of Science and Technology, Govt of West Bengal sponsored project on "Restructuring rice genotypes for high yield, early duration, high iron and zinc content through advanced plant breeding techniques" 2015-18 (PI)
- ICAR sponsored program project under Technology component entitled "Improving hybridization efficiency and seed set in paddy" along with Directorate of Rice Research, Hyderabad and University of Agricultural Science, Bangalore 2015- 2019 (Nodal Officer of the program and PI, CU).
- Breeding for Multi-stress tolerant varieties in rice and mustard funded by Department of Agriculture Government of West Bengal. (2020-2024)

## **External Activity**

- Expert, Tea Research Association, Tocklai, Assam, in Plant Breeding and Biotechnology External Member, Board of Studies, Palli Shiksha Sadan, Srineketan, Viswa Bharati, West Bengal (2012-2016)
- External Expert in central Sericulture Board, Behrampore, West Bengal (2012-2016)
- Ph. D. thesis Examiner, Bidhan Chandra Krishi Viswavidyalaya (West Bengal), UBKV, (West Bengal), Viswa Bharati, Shantiniketan, Banaras Hindu University.
- Examiner, Dept. of Botany, University of Kalyani, BCKV, UBKV, OUAT.
- Expert, Forestry genetics, in Forest Research Institute (Dehra Dun), India
- Examiner, Ph.D. thesis evaluation, Rajshahi University, Dhaka University Bangladesh, and Universiti Putra Malaysia, Malaysia

## Achievements/Awards

## A. Developed varieties

- Two Vegetable cowpea varieties, **Bidhan Barbati 1** and **Bidhan Barbati 2** released by State Variety Release committee at BCKV in 1994
- An outstanding variety of sesame **Suprava** (**CuMS17**) has been developed with high yield (>1.5 t/ha) and high oil content (50%) and released by Central Variety Release committee, Govt. of India in 2017 for different states of India including West Bengal. The variety has already been recognised as a National Check Variety for All India Coordinated Sesame Improvement Program for IVT, AVT trials and new variety release program on all India basis.
- Three more varieties of sesame are in the process of testing and evaluation for release.
- The rice varieties **Gotra Bidhan Mutant** with high yield and lodging tolerance (125 duration) and **CU 48**, cold tolerant variety are in ICAR trial.
- B. First report on **arsenic tolerant gene** in rice (Published in New Phytologist 2003)
- C. **Marie-Curie** International Fellowship by **European Commission** for "Low Arsenic Grain Rice" (2009-12) at the University of Aberdeen, Scotland, UK.
- D. Selected as Local Secretary of Sectional President (Agriculture and Forestry) in 100 years Celebration of Indian Science Congress Association held at Calcutta University, on 3rd January 2013
- E. Awarded **Fellow**, **West Bengal Academy of Science and Technology** (WAST), India in 2013 for significant contribution in the field of Genetics and Plant Breeding.
- F. Fellow, Indian Society of Genetics and Plant Breeding, New Delhi, 1995

#### **Publications**

# A. Total publications in research journals

- 1. **T. Dasgupta** and P. K. Das.1980. Studies on selection for higher yield in durum wheat(*Triticum durum*) under late sown rainfed condition in of West Bengal. *Indian Agriculturist*, vol. 24(1): 11 22
- 2. **T. Dasgupta** and P. K. Das.1982 . D<sup>2</sup> analysis, phenotypic stability and varietal adaptability in bread wheat . *Bangladesh Journal of Botany*, vol.11(2): 124 131
- 3. **T. Dasgupta** and P. K. Das.1984. Yield component analysis and selection indices in blackgram. *Indian Agriculturist*, vol.28 (3): 191 198.
- 4. **T. Dasgupta** and P. K. Das.1984. Genetic divergence in wheat. *Egyptian Journal of Genetics and Cytology*, vol. 13: 53-60. (Citation: 8)
- 5. **T. Dasgupta** and P. K. Das.1984. Multivariate analysis and selection of parents for hybridization in blackgram. *Phillippine Agriculturist*, vol. 44(1): 86 -92 (NAAS Rating: 7.0; Citation: 34
- 6. **T. Dasgupta** and P. K. Das . 1984 . Multivariate analysis in blackgram . *Indian Journal of Genetics and Plant Breeding* , vol.44 (2) : 241 -47. (**NAAS rating: 6.55**)
- 7. **T. Dasgupta** and P. K. Das. 1985. Gene pool divergence and selection of stable parents in blackgram. *Bangladesh Journal of Agricultural Research*, vol.101 (1): 9 -15. (Citation:13)

- 8. **T. Dasgupta**, A. B. Mondal and T. G. Choudhury . 1986. Combining ability and heterosis in similar leaf mutants in jute. *Phillippine Agriculturist*, vol. 69 (1): 107 –111.
- 9. **T. Dasgupta** and P. K. Das.1987.Yield attributes and ideal plant type in Blackgram. *Bangladesh Journal of Botany*, vol.15 (2): 143 149. ( **NAAS rating : 6.38**)
- 10. **T. Dasgupta** and P. K. Das. 1987. Inheritence of pod length and cluster number in blackgram. *Indian Journal of Agricultural Sciences*, vol.57 (1): 50 -52 (NAAS rating: 6.00; Citation: 5)
- 11. M. O. Islam, **T. Dasgupta**, P. Gayen and S. Sen. 1987. Studies on seedling root characters in chickpeas. *Annals of Agricultural Research*, vol.8 (2): 280 284.
- 12. **T. Dasgupta** and P. K. Das. 1987. Genetics of yield in black gram. *Indian Journal of Genetics and Plant Breeding*, vol.47 (3): 265 -270 (NAAS rating: 6.19; Citation: 8)
- 13. M. O. Islam, S. Sen and **T. Dasgupta.**1987.Seedling root length and seedling root number in mungbean. *TVIS NEWS (AVRDC)*, vol. 2(2): 17-18. (Citation: 2)
- 14. **T. Dasgupta** and P. K. Das. 1987. Inheritance of grain filling in bread wheat. *Annals of Agricultural Research*, vol.10 (3): 237 -242.
- 15. T. Dasgupta and A. B. Mondal. 1988. Diallel analysis in wheat. *Indian Journal of Genetics and Plant Breeding*, vol.48 (2): 167 -170. ( NAAS rating: 6.55; citation: 14)
- 16. **T. Dasgupta**, O. Islam K. Sarkar and P. Gayen. 1987. Genetic divergence in chickpea. *Experimental Genetics*, vol.3: 15-21. (Citation: 13)
- 17. **T. Dasgupta** and A. B. Mondal.1988. Combining ability for kernel weight in bread wheat under acid soil. *Bangladesh Journal of Botany*, vol.17 (2): 201-203. ( **NAAS rating: 6.31; IF**: **0.301**)
- 18. H. A. van Rheenen and **T. Dasgupta**.1990. Efficiency of duplicated augmented design in International Chickpea Screening Nurseries. *Indian Journal of Pulses Research*, vol.3 (2): 103-106.
- 19. **T. Dasgupta** and P. K. Das.1991.Genetic divergence in black gram. *Indian Journal of Agricultural Research*, vol.25 (1): 7-13.
- 20. **T. Dasgupta** and P. K. Das. 1991. Combining ability for branch number and seed per pod in blackgram. *Indian Journal of Pulses Research*, vol.4 (2): 141 -145.
- 21. P. Gayen, P. Roychowdhury, **T. Dasgupta** and S. Dana.1991. Variability and correlation studies of some characters of pod and seed in mungbean. *Annals of Agricultural Research*, vol.12 (3): 255-258.
- 22. O. Singh, C. L. L. Gowda, S.C. Sethi and **T. Dasgupta.**1992. Genetic analysis of agronomic characters in chickpea .I. Estimates of genetic variances from diallel mating designs. *Theoretical and Applied Genetics*, vol.83: 956-962. (NAAS Rating: 11.57; IF: 5.4; Citation: 47)
- 23. **T. Dasgupta** M. O. Islam, and P. Gayen. 1992. Genetic variability and yield component analysis in chickpea. *Annals of Agricultural Research*, vol.13: 157-160 ( Citation: 31).
- 24. P. Gayen, P. Roychowdhury, **T. Dasgupta** and S. Dana. 1992. Studies on some physical characters of primary leaf in mungbean. *Crop Research*, vol.5 (3): 579 -588.
- 25. **T. Dasgupta**, G. Dey, P. Gayen, S.K. Mondal and S. Dutta. 1992. Combining ability for harvest index in mungbean . *Experimental Genetics*, vol.8: 1-4.
- 26. O. Singh, C. L. L. Gowda, S.C. Sethi, **T. Dasgupta**, J. Kumar and J. B. Smithson.1993. Genetic analysis of characters in chickpea. **II**. Estimates of genetic agronomic variance fron line x tester mating design. *Theoretical and Applied Genetics*, vol. 85: 1010-1016 (NAAS Rating: 11.57; IF: 5.4; Citation: 14).

- 27. H. A. van Rheenen ,**T. Dasgupta** , G. Swaminathan and J.H. Miranda.1994. The use of duplicated augmented design in chickpea line trials. *Annals of Agricultural Research*, vol.15 (1): 1 7.
- 28. N. Kar, **T. Dasgupta**, P. Hazra and M.G. Som. 1995. Association of pod yield and its components in vegetable cowpea. *Indian Agriculturist*, vol. 39(4): 231 -238. ( **NAAS** rating: 4.27; Citation: 6)
- 29. N. Kar, **T. Dasgupta**, P. Hazra and M.G. Som. 1995. Study on ideal picking date in vegetable cowpea. *Vegetable Science*, vol.22 (2): 92-94.
- 30. J.Kumar, K.B. Singh, R.S. Malhotra, J.H. Miranda and **T. Dasgupta.**1996.Genotype environment interaction for seed yield in chickpea. *Indian Journal of Genetics and Plant Breeding*, vol.56 (1): 69-78. (NAAS rating: 6.51; Citation: 12)
- 31. A.Chattopadhyay, K. Chacraborty, **T. Dasgupta** and M.G. Som. 1996. Evaluation of genotypes for agronomic and morphological characters in vegetable cowpea. *Indian Journal of Horticulture*, vol.53 (4): 304-8. ( NAAS rating: 6.16; Citation: 4)
- 32. A.Chattopadhyay, K. Chacraborty, **T. Dasgupta** and M.G. Som.1996. Genetic analysis of pod yield and its three important components employing a diallel cross in cowpea. *Vegetable Science*, vol.23 (1): 69-74.
- 33. A.Chattopadhyay, K. Chacraborty, **T. Dasgupta** and M.G. Som.1997. character association and path analysis in vegetable cowpea. *Madras Agricultural Journal*, vol. 84(3): 153-56.
- 34. A.Chattopadhyay, K. Chakraborty, **T. Dasgupta** and M.G. Som.1997. Estimation of genetic parameters in parental, F<sub>1</sub> and F<sub>2</sub> generations of cowpea (*Vigna unguiculata* L.). *Indian Agriculturist*, vol.41: 49-53.
- 35. S. Das and **T. Dasgupta.**1997 . *In vitro* callus induction and its maintenance in *Sesamum indicum* **L.** var. RT-4, *Indian Biologist* vol. 29 (2): 21-24.
- 36 **T. Dasgupta** and S.Das.1998. Combining ability in mungbean. *Indian Journal Of Pulses Research*, vol.11 (1).
- 37. T. Dasgupta, S.Biswas and S.Das. 1998. Character association of yield in chickpea. *Indian Agriculturist*, vol. 42 (3): 147-153. (NAAS rating 4.11).
- 38. S. Das and **T. Dasgupta**. 1999. Combining ability in sesame. *Indian Journal of Genetics and Plant Breeding* vol. 59(1): 69-75. ( NAAS rating: 7.34; Citation: 26).
- 39 J. Mandal, A. Chattopadhyaya, P. Hazra, T. Dasgupta and M.G. Som. 1999. Genetic variability for three biological nitrogen fixation components in Cowpea. *Crop Research*, vol 18(2): 222-225. (Citation: 5).
- 40 A. Chattopadhyaya, P. Hazra, **T. Dasgupta** and M.G. Som.1999. Nodulating behaviour of Cowpea\_ A Review. *Journal Interacdemicia*, Vol 3: 385-90.
- 41 A.Chattopadhyay, **T. Dasgupta**, P. Hazra and M.G. Som.2000. Nodulation characters and their relationship with pod yield and pod protein content in cowpea. *Annals of Agriculture Research* vol 21(1): 140-42.
- 42 I. Dana and T. Dasgupta.2001. Combining ability in blackgram. *Indian J of Genetics and Plant Breeding* 61(2): 170-171 ( NAAS rating: 7.34; citation: 20).
- 43 Basumita Roychoudhury and **T. Dasgupta** 2002. Yield component analysis in Mungbean *Indian Agriculturist* vol.46(1&2): 73-78 ( NAAS rating: 4.11).
- 44 N. Moitra, B. Roychoudhury, N. Mondal and **T. Dasgupta**. 2003. The pattern of accumulation of storage protein during the development of urdbean (*Vigna mungo*) seeds *Indian Biologist*, vol.35(1): 29-32.
- 45 A. Chattopadhyaya, P. Hazra, **T. Dasgupta** and Subhadeep Nath. 2003. Heterosis studies in cowpea cultigroup. *The Horticulture Journal*, vol.16(2): 49-54.

- 46 **T.Dasgupta** and M.Singh 2003. Diversity in advanced breeding lines of Chickpea. **International Chickpea and Pigeonpea** (Citation: 7). **Newsletter (ICRISAT)** ICPN 10: 38-41
- 47 **Tapash Dasgupta**, S. Hossain, Andrew Meharg and Adam Price. 2004. An arsenate tolerance gene on chromosome 6 of rice. *New Phytologist* 163: 45-49. ( **NAAS Rating: 16.32; IF: 9.4; Citation: 109, NCBI Pubmed** ). DOI: 10.1111/J.1469-8137.2004.01109.X
- 48 **T. Dasgupta**, K. Mukherjee, Basumita Roychoudhury and D. Nath. 2004.Genetic divergence in horsegram. *Legume Research* Vol. 28(3): 166-171. ( **NAAS rating : 6.15; Citation : 1).**
- 49 Tamina Begum and **T. Dasgupta** .2005. Character association in sesame. *Indian Agriculturist* 47: 253-258. (NAAS rating : 4.11; citation :9)
- 50 D. Nath, B. Roychoudhury and **T.Dasgupta**.2005. Genetic Divergence in some cultivated and wild species of *Vigna*. *Indian Agriculturist* Vol: 49: 27-32 (NAAS rating 4.11)
- 51 T. Begum and **T.Dasgupta**.2005. Gamma ray and EMS induced chlorophyll mutation in sesame. **Sesame and Safflower Newsletter** (FAO). No. 20: 48-52.
- 52 T. Begum, B. Roychowdhury and **T. Dasgupta**.2005. Study of Genetic divergence of some varieties of sesame by SDS PAGE for seed storage protein. *Bangladesh Journal of Genetics and. Biotechnol.* Vol.6: 11-14.
- 53. B. RoyChowdhury, D. Nath, K. Bagchi, N. Mondal and **T. Dasgupta**. *In-vitro* screening of some germplasms of *Vigna* under salinity condition. *Bangladesh Journal of Genetics and Biotechnol*. Vol.6: 37-40.
- 54 T.Begum and **T. Dasgupta** .2006. Effect of Ethyl Methane Sulphonate insegregating population in sesame (*Sesame indicum L.*) *Bangladesh Journal of Genetics and Biotechnol*. Vol6:1-3.
- 55. D. Nath, B. RoyChowdhury, **T. Dasgupta** and N. Mondal. 2005. Diversity of mungbean germplasms through seed protein polymorphism by SDS PAGE. *Bangladesh Journal of Genetics and Biotechnol*. Vol. 6: 15-17.
- 56. M. Das, A.K. Das and **T. Dasgupta**. 2007. Association between yield and yield components in short duration Pigeonpea. *Indian Agriculturist*. Vol: 51(3&4): 173-176.
- **57.** Gareth Norton, Meher Nigar, Paul Williams, **Tapash Dasgupta**, Andy Meharg and Adam H Price. 2008. A three gene model for arsenate tolerance in rice. *Journal of Experimental Botany*, Vol.59, No. 8: 2277-2284. ( **NAAS rating: 11.91; IF: 6.9; citation: 21: NCBI Pubmed).** DOI: 10.1093/JXB/ERN098
- 58. Rakshit, S. Rakshit, A. Deokar and **T. Dasgupta**. 2008. Effect of different explant annot hormones on *in vitro* callus induction and regeneration of Pepper (*Capsicum annuum L.*). *Asian Journal of Biological Science*. 3(1): 180-183.
- 59. S. Chakraborty, D. Mukherjee and **T.Dasgupta** . 2008. Cytological study on chromosome behaviour and new report on nature of mode of pollination of *Swertia chirayita* , a high value endangered medicinal plant of North Eastern Himalayan region. *Caryologia* , 61 (4): 1-10 . ( **NAAS rating : 8.10; Citation: 23).**
- 60. Gareth J Norton, Guilan Duan, **Tapash Dasgupta**, M Rafiqul Islam, Ming Lei, Yongguan Zhu, Claire M Deacon, Annette C Moran, Shofiqul Islam, Fang-Jie Zhao, Jacqueline L Stroud, Steve P McGrath, Joerg Feldmann, Adam H Price and Andrew A Meharg.2009. Environmental and Genetic Control of Arsenic Accumulation and Speciation in Rice Grain: Comparing a Range of Common Cultivars Grown in Contaminated Sites Across Bangladesh, China, and India. *Environmental Science and Technology*. **43**(21):8381-8386. ( **NAAS Rating : 11.48 ; IF : 5.39;Citation : 109 ; NCBI Pubmed**). DOI: 10.1021/ES9018440
- 61. G. Norton, **T. Dasgupta**, M. Rafiqual Islam, Shofiqual Islam, Claire M. Deacon, Fang-jie Zhao, Jacqueline L. Stroud, Steve P. Mcgrath, Joerg Fieldman, Adam H. Price and Andrew A. Meharg. 2010. Arsenic influence on genetic variation in grain trace- elements nutrient

- content in Bengal delta grown rice. *Environmental Science and Technology*. 44: 8284-8288. ( **NAAS Rating: 17.40; IF: 11.4; Citation: 37; NCBI Pubmed** ). DOI: 10.1021/ES101487X
- 62. Tamina Begum and Tapash Dasgupta .2010. A comparison of the effects of physical and chemical mutagens in sesame (*Sesamum indicum* L.). *Genetics and Molecular Biology*, 33 (4):761-66). (NAAS Rating: 8.10; Citation: 62; NCBI Pubmed).
- 63. Tamina Begum and Tapash Dasgupta.2011. Effect of mutagens on character association in sesame (sesamum indicum 1.) Pakistan Journal of Botany, 43(1): 243-251( NAAS Rating:7.21; IF: 1.1; Citation: 31).
- 64. JL Stroud,, AM Khan, GJ Norton, MR Islam, **Tapash Dasgupta**, YG Zhu, AH Price, AA Meharg, SP McGrath, FJ Zhao. 2011. Assessing the labile arsenic pool in contaminated paddy soils by isotopic dilution techniques and simple extractions. *Environmental Science and Technology* 45: 4262-4269 (NAAS Rating: 17.40; IF: 11.4
- 65.; Citation: 82; NCBI Pubmed).
- 66. JL. Stroud, G, Norton, MR Islam, **T Dasgupta**, RP White, AH Price, AA Meharg, SP McGrath and F-J. Zhao 2011. The dynamics of arsenic in four paddy fields in the Bengal delta. *Environmental Pollution* 159: 947-953 ( **NAAS Rating: 14.90**; **IF: 8.9**; **Citation**: **147**; **NCBI Pubmed** ).
- 67. A Rakshit, S Rakshit and **Tapash Dasgupta** .2011. Differential Callusing response in Chilli ( *Capsicum annuum* L.). *Journal of Plant Science Research* 27(2): 117-122
- 68. Norton, G. J., Duan, G., **Dasgupta, T.**, Islam, M. R., Lei, M., Zhu, Y., ... & Meharg, A. A. (2009). Environmental and genetic control of arsenic accumulation and speciation in rice grain: comparing a range of common cultivars grown in contaminated sites across Bangladesh, China, and India. Environmental Science & Technology, 43(21), 8381-8386. (NAAS rating: 17.40; Citation: 147)
- 69. A H Price, G Noton, D Salt, O Ebenhoeh, A A Meharg, C Meharg, M Rafiqual Islam, R N Sarma, **T Dasgupta**, A M Ismail, K L McNally, H Zhang, I C Dodd and W J Davies.2013. Alternate wetting and drying irrigation for rice in Bangladesh: Is it sustainable and has plant breeding something to offer? *Food and Energy Security (UK) Wiley publn*, **2 (2): 120-29 (IF: NA; Google Citation: 16)** DOI: 10.1002/FES3.29
- 70. A A Meharg, G Norton, C Deacon, P William, E Adomako, A Price, Y Zhu, G Li, S Mcgrath, A Villada, A Sommella, P Mangala, CS De Silva, H Brammer, **T Dasgupta.** 2013. Variation in rice cadmium related to human exposure. *Environmental Science and Technology* 47: 5613-5616. ( **NAAS Rating: 17.40; IF: 11.4; Citation: 424; NCBI Pubmed**) DOI: 10.1021/ES400521H
- 71. Biswarup Mukherjee, Pritam Das, Qadir Alam, Disharee Nath and **Tapash Dasgupta** . 2013 . Molecular characterization of rice genotypes using microsatellite markers. *Oryza* 50(1) : 35-40.
- 72. Pritam Das, Chand Kumar Santra, Sankar Mukhopadhyay, Biswarup Mukherjee and **Tapash Dasgupta** .2013 .Genetic variability of cytoplasmic male sterile lines in rice ( *Oryza sativa* L.). *Journal of Agriculture and Veterinary Science* 3 (5): 95-100. (Citation: 1).
- 73. Biswarup Mukherjee, Pritam Das, Tathagata Roy Chaudhuri and **Tapash Dasgupta** .2013. Characetrization of arsenic contaminated rice (Oryza sativa L) through RAPD markers. *Journal of Agriculture and Veterinary Science* 5 (1): 10-14.
- 74. Disharee Nath and **Tapash Dasgupta.** 2013. Genotype x environment interaction and stability analysis in mungbean. *Journal of Agriculture and Veterinary Science* 5 (1): 67-70.
- 75. Pritam Das, Biswarup Mukherjee, Chand Kumar Santra, Sankar Mukhopadhyay and **Tapash Dasgupta**. 2013. Evaluation of genotypes for fertility restoring and maintain behavior in rice (

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# B. Books / Book Chapter

B. Roychoudhury, S. Ghosh, N. Mandal and **T.Dasgupta**.2007Genetic diversity in some wild and cultivated germplasms in VIGNA by RAPD marker. In :**Recent Trends in Horticultural Biotechnology** edited by R. eshavachandran, P.A. Nazeem, D. Girija, P.S. John and K.V. Peter. New Delhi, New India Pub., 2007,

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**Total Citation as per Google Scholar** : 2324; h index: 23; I10 index: 45

Publications included in Pub Med (NCBI) : 10

## **Conference Participation**

- 1. **T. Dasgupta** and P. K. Das.1988. Heterosis and genetic divergence in blackgram. *Proc. Of National Symp. on Heterosis Breeding in Self-pollinated Plants held on 12<sup>th</sup>* and 13<sup>th</sup> March 1988 at B.C.K.V., West Bengal, 257-261
- 2. A.B. Mondal and **T. Dasgupta.** 1988. Heterosis in Wheat. *Proc. Of National Symp. on Heterosis Breeding in Self-pollinated Plants held on 12<sup>th</sup>* and 13<sup>th</sup> March 1988 at B.C.K.V., West Bengal, 84-89.
- 3. R. Chowdhury, A. Das and **T. Dasgupta.** 1996. Specific chromosome (9- specific) DNA sequences could cluster local Indica rice germplasm into ecological groups. *Proc. Of 2<sup>nd</sup> International crop Science Congress held at New Delhi*, page: 19.
- 4. **T.Dasgupta**, B. Roychoudhury and S. Chattopadhyaya.2001. Gene pool divergence of morpho-physiological attributes and seed storage protein profile in sesame. *Proc. of Diamond Jubilee Symposium of the Indian Society of Genetics and Plant Breeding held at New Delhi during Nov.6-9, 2001. page: 323 (Awarded best paper)*
- 5. B. Roychoudhury, S.Ghosh, N. Mandal and **T. Dasgupta**. 2005. Genetic diversity in some wild and cultivated germplasms in *Vigna* by RAPD marker. *Proc. Of National Symposium on Biotecnological inventions for improvement of Horticultural Crops: Issues and Strategies held at College of Agriculture, Kerala Agricultural University, Thissur, Kerala page: 239-242*
- 6. **T.Dasgupta**, T. Begum, N. Mandal and D. Nath. Effect of induced mutation in a 7 X 7 half diallel cross on the genetic control of the quantitative traits and variability in the advance generation in morphological, biochemical and molecular level in sesame. *Proc. FAO/IAEA international symposium on induced mutation in plants.* 12-15 August, 2008, Vienna. Austia. IAEA-CN-167-132P
- 7. Adam Price, G. Norton, M.Niger, P.William, , D. Lou-Hing, **T. Dasgupta**, L. Xiong and A. Mehrag. 2008. Breeding plants for desirable traits with respect to Arsenic. *Proc.* 20<sup>th</sup> New Phytologist Symposium on Arsenic: Unravelling its metabolism and speciation in plants held at Aberdeen, Scotland 26-27 June, 2008, page 20.
- 8. **Tapash Dasgupta**. Arsenic research on rice in West Bengal- a review. An International workshop on "Arsenic contamination in rice in South East Asia and their mitigation" held in Dhaka 7-10 December, 2010 jointly organised by University of Aberdeen, IRRI and Bangladesh Agricultural University.
- 9. **Co-Chairman** in the session of 'Plant Breeding, Genomics and Crop improvement" of National symposium organized by Agricultural Society of India, held on 26-28 February, CU, 2013.
- 10. A Das, S Pandey and **Tapash Dasgupta**. 'Genotype-environment interaction in sesame genotypes and identification of stable types'. Abstract Proceeding of International conference on Agricultural and Animal Sciences held at International centre for Research and Development, Sri Lanka on 8-9 July,2013 (pp64)
- 11. U Bhattacharyya, SK Pandey, T Begum, A iqbal, D Nath and **Tapash Dasgupta**: Presented: In silico mining of SSRs and analysis of ESTs of jute. Abstract Proceeding

- of National symposium on 'Sustainable Agriculture for food and nutritional security in East and North East India: Prospect and future' organized jointly by Association of Plant Breeding and improvement and Institute of Agricultural Science held at Institute of Agricultural Science on March 01, 2014 (pp 31).
- 12. B Mukherjee, P Das, L Deb, D Nath and **Tapash Dasgupta**: Presented: Genetic diversity analysis of rice cultivars differing in arsenic uptake in grains and microsatellite markers based polymorphism. Abstract Proceeding of National symposium on 'Sustainable Agriculture for food and nutritional security in East and North East India: Prospect and future' organized jointly by Association of Plant Breeding and improvement and Institute of Agricultural Science held at Institute of Agricultural Science on March 01, 2014 (pp 31)
- 13. **Tapash Dasgupta**: Hybrid rice research consortium meeting at IRRI , Manila , Philippines on 4-8 April,2015.

## **NCBI** gene-expression repository

Geo accession: GSE4471 for AsTol6.1, AsTol6.2 and AsTol10 (2004)

Gene Bank accession no. KT 727967 - KT727972 of sesame genomes (2015) Submitted

Whole Genome sequence in sesame in NCBI (May,2017)

## **Member of Society**

Life member, Indian Society of Genetics and Plant Breeding, IARI, New Delhi Life member, Indian Science Congress Association, Kolkata

Member, Society of Breeding Research for Asia and Oceania Life member,

The Agricultural Society of India

Founder Vice-President, Association of Plant Breeding and Improvement, West Bengal

#### **Editorial Service**

Editor, Advances in Plants and Agriculture Research (Medcrave Publications)

Technical Editor, International journal of Agriculture, Environment and Biotechnology Reviewer, Acta Physiologiae Plantarum

Reviewer, National Academy Science Newsletter (Springer), India

Reviewer, Nucleus Journal (Springer), Legume Research, Journal of Environmental Biology, African journal of biotechnology, Jordan Journal of Biology, Spanish Journal of Agricultural Science

#### **Research Collaboration**

Bidhan Chandra Krishi Viswavidyalaya and UBKV (State Agril. University), West Bengal, India

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Prof. Steve McGrath and Dr. Fangjie Zhao, Rothamstad International Institute,

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