

SHYAMAL KRISHNA TALUKDER

Assistant Professor of Inbred Rice Breeding and Genetics
Texas A&M AgriLife Research center at Beaumont, Texas
Department of Soil and Crop Sciences, Texas A&M University

Education/Training

2013	PhD	Plant Breeding and Genetics, Kansas State University, USA.
2002	MS	Horticulture, Bangladesh Agricultural University, Bangladesh.
2000	BS	Agriculture, Bangladesh Agricultural University, Bangladesh.

Position and Employment

2021- Present	Assistant Professor, Texas A&M AgriLife Research center; Department of Soil and Crop Science, Texas A&M University.
2018-2021	Rice Breeder, California Cooperative Rice Research Foundation, Rice Experiment Station (RES), Biggs, CA.
2013-2018	Postdoctoral Research Associate, Noble Research Institute (NRI), Ardmore, OK.
2007-2013	Graduate Research Assistant, Kansas State University.
2002-2007	Research Assistant/Associate, Bangladesh Agricultural University.

Program Overview

The inbred rice breeding and genetics program aims to develop rice cultivar with enhanced yield along with high milling and cooking quality for the market, disease and insect resistance, herbicide tolerance, high seedling vigor, cold, heat and drought tolerance. The breeding program follows conventional breeding approaches integrated with molecular and high throughput breeding technology i.e., marker assisted selection, genomic selection, model assisted selection, gene editing, induced mutation etc. My major research focus is to address fundamental rice growing issues including biotic and abiotic factors in the region and worldwide using GWAS and biparental mapping for marker development, transcriptomics, genomics, semi-high throughput phenotyping and genome editing. I have great interest on training graduate students and scientists, generate knowledgebase, publish research articles, develop multidimensional collaboration with various scientists around the USA and the World.

Patents

1. Andaya, V.C., F. Jodari, **S.K. Talukder**, T.B. De Leon, C.B. Andaya, K.S. McKenzie. 2021. Rice cultivar L-208. Issuing Organization: United States Patent and Trademark Office. Assignee: California Cooperative Rice Research Foundation, Inc. Patent Number. 11006596. Application Number. US17/123315. Status: Approved.
2. Andaya, V.C., T.B. De Leon, **S.K. Talukder**, C.B. Andaya, K.S. McKenzie. 2021. Rice cultivar M-211. Issuing Organization: United States Patent and Trademark Office. Assignee: California Cooperative Rice Research Foundation, Inc. US Patent No. 11013192. Application Number. 17/123329. Status: Approved.
3. Trick, H.N., A.K. Fritz and **S.K. Talukder**. 2020. Expression of thermostable starch synthase genes improves the yield in heat stress. Issuing Organization: United States Patent and

Trademark Office. Assignee: Kansas State University. US Patent No. US10557144B2. Application Number: US15/957639. Status: Approved.

Publications

1. Kang, Y., **S.K. Talukder**, Z. An, I. Torres-Jerez, N. Krom, D. Huhman, M. Udvardi and M.C. Saha. 2021. Dissection of physiological, transcriptional, and metabolic traits in two tall fescue genotypes with contrasting drought tolerance. *Plant and Environment Interaction*. (Accepted for publication).
2. **Talukder, S.K.**, S. Islam, N. Krom, J. Chang and M.C. Saha. 2021. Drought responsive putative marker-trait association in tall fescue as influenced by the presence of a novel endophyte. *Front. Plant Sci.* 12:729797. <https://doi.10.3389/fpls.2021.729797>.
3. **Talukder, S.K.**, S. Bhamidimarri, K. Chekhovskiy and M.C. Saha. 2020. Mapping QTL for traits related to summer dormancy in tall fescue (*Festuca arundinacea* Schreb.). *Scientific Reports*. 10:14539. <https://doi.org/10.1038/s41598-020-71488-8>.
4. Halder, J., J. Zhang, S. Ali, J.S. Sidhu, H.S. Gill, **S.K. Talukdar**, J. Kleinjan, B. Turnipseed and S.K. Sehgal. 2019. Mining and genomic characterization of resistance to Tan spot, *Stagonospora nodorum* blotch (SNB), and *Fusarium* head blight in Watkins core collection of wheat landraces. *BMC Plant Biol* 19(1), 480. <https://doi.org/10.1186/s12870-019-2093-3>.
5. Kopecký, D., **S.K. Talukder***, J. Zwyrtková, M. Trammell, J. Doleže and M.C. Saha. 2019. Inter-morphotype hybridization in tall fescue (*Festuca arundinacea* Schreb.): exploration of meiotic irregularities and potential for breeding. *Euphytica*. 215: 97. <https://doi.org/10.1007/s10681-019-2419-0> (*equal first author).
6. Tian, B., **S.K. Talukder***, J. Fu, A.K. Fritz and H.N. Trick. 2018. Expression of a rice soluble starch synthase gene improved the grain yield in heat stress conditions in wheat. *In Vitro Cellular & Developmental Biology*. DOI: 10.1007/s11627-018-9893-2.
7. **Talukder, S.K.**, P. Azhaguvel, K. Chekhovskiy and M.C. Saha. 2018. Morphotype specific marker development in tall fescue and phylogenetic relationship among *Festuca* Species. *PLOS ONE*. <https://doi.org/10.1371/journal.pone.0191343>.
8. **Talukder, S.K.**, and M.C. Saha. 2017. Toward genomics-based breeding in C3 cool-season perennial grasses. *Front. Plant Sci.* doi.org/10.3389/fpls.2017.01317.
9. **Talukder, S.K.**, P. Azhaguvel, S. Mukherjee, C.A. Young, Y. Tang, N. Krom and M.C. Saha. 2015. *De novo* assembly and characterization of water stress related transcriptome in tall fescue using Illumina paired-end sequencing. *The Plant Genome* 8: 1-13.
10. **Talukder, S.K.**, P.V.V. Prasad, T. Todd, M.A. Babar, J. Poland, R.L. Bowden and A. K. Fritz. 2015. Effect of cytoplasmic diversity on post anthesis heat tolerance in wheat. *Euphytica* 201: 1-12.
11. **Talukder, S.K.**, M.A. Babar, K. Vijayalakshmi, J. Poland, P.V.V. Prasad, R. Bowden and A.K. Fritz. 2014. Mapping QTL for the traits associated with heat tolerance in wheat (*Triticum aestivum* L.). *BMC Genetics* 15: 97.
12. Khan, M.M.A., A.B.M.A.H.K. Robin, M.A.N. Nazim-Ud-Dowla, **S.K. Talukder** and L. Hassan. 2010. *In vitro* regeneration potentiality of Brassica genotypes in differential growth regulators. *Bangladesh J. Agril. Res.* 35: 189-199.
13. Khan, M.M.A., A.B.M.A.H.K. Robin, M.A.N. Nazim-Ud-Dowla, **S.K. Talukder** and L. Hassan. 2009. *Agrobacterium*-mediated genetic transformation of two varieties of *Brassica*: optimization of protocol. *Bangladesh J. Agril. Res.* 34: 287-301.

14. Prodhan, M.A., L. Hassan and **S.K. Talukder**. 2008. Study of *in vitro* regeneration potentiality of ten Brassica genotypes from *Brassica campestris*, *Brassica napus* and *Brassica juncea*. Bangladesh J. Prog. Sci & Tech. 6: 9-12.
15. Prodhan, M.A., L. Hassan and **S.K. Talukder**. 2007. Optimization of Agrobacterium mediated genetic transformation protocol in two important *Brassica* varieties (Safal and Tori-7) of Bangladesh. Bangladesh J. Crop Sci. 18: 265-272.
16. **Talukder, S.K.**, K.M. Nasiruddin, S. Yasmin, R. Begum and L. Hassan. 2003. Shoot proliferation of *Dendrobium* orchids with BAP and NAA. Asian Journal of Biological Sciences 3: 1058-1062.
17. Yasmin, S., K.M. Nasiruddin, R. Begum and **S.K. Talukder**. 2003. Regeneration and establishment of potato plantlets with BAP and NAA. Asian Journal of Plant Sciences 2: 936-940.
18. Yasmin, S., K.M. Nasiruddin and **S.K. Talukder**. 2003. *In vitro* microtuberization of potato with different CCC and photoperiod combination. Molecular Biology & Biotechnology Journal 1: 28-30.
19. **Talukder, S.K.**, K.M. Nasiruddin, S. Yasmin, R. Begum and S. Sarker. 2002. *In vitro* Root formation on orchid plantlets with IBA and NAA. Progressive Agriculture 13: 25-28.

Book Chapter

- ✓ Saha, M.C., **S.K. Talukder**, P. Azhaguvel, S. Mukherjee and K. Chekhovskiy. 2015. Deciphering drought tolerance in tall fescue [*Lolium arundinaceum* (Schreb.) Darbysh.]. Springer International Publishing Switzerland. H. Budak, G. Spangenberg (eds.), Molecular Breeding of Forage and Turf. doi: 10.1007/978-3-319-08714-6_1.

Abstracts publication with contribution

1. Islam, M.S., **S.K. Talukder**, J. Black, M. McMahon, K. Chekhovskiy and M.C. Saha. 2019. Toward the identification of drought tolerance genomic region in tall fescue through genome-wide association mapping. International Plant & Animal Genome XXVII conference. Jan. 12-16, San Diego, CA. USA.
2. **Talukder S.K.**, N. Krom, K. Chekhovskiy, J. Black, Y. Tang, S. Liang and M.C. Saha. 2018. Understanding summer dormancy and marker development in tall fescue using RNA seq. International Plant & Animal Genome XXVI conference. Jan. 13-17, San Diego, CA. USA.
3. Molla M.M.H., M.C.Saha, D. Serba, **S.K.Talukder** and M.M Hossain. 2018. Phylogenetic Analysis of Forage and Cereal Species Using Chloroplast Gene: matK and rbcR. *In Vitro Cellular & Developmental Biology Conference*. New York. Volume 54: 31. USA.
4. Saha M.C., **S.K. Talukder**, N. Krom, K. Chekhovskiy, Y. Tang, S. Liang and J. Black. 2018. Study summer dormancy in tall fescue for enhanced breeding. International Plant & Animal Genome XXVI conference. Jan. 13-17, San Diego, CA. USA.
5. Saha, M.C., **S.K. Talukder**, J. Black. 2017. Effect of endophyte on drought tolerance of tall fescue. International miCROPe 2017 symposium. Dec. 4 – 7, Vienna, Austria.
6. **Talukder, S.K.**, Black J., Chekhovskiy K., and Saha M.C. 2017. Enhancing water use efficiency in tall fescue for greater persistence. ASA, CSSA, and SSSA Annual Meeting. Oct. 22-25, Tampa, FL. USA.
7. **Talukder, S.K.**, N. Krom, S. Liang, J. Black, K. Chekhovskiy, Y. Tang, J. Chang and M.C. Saha. 2017. SNP calling and validation from transcriptome sequences in tall fescue aiming to

- map QTL for summer dormancy. International Plant & Animal Genome XXV conference. Jan. 14-18, San Diego, CA. USA.
8. **Talukder**, S.K., K. Chekhovskiy, J. Black and M.C. Saha. 2016. Mapping QTL for digestibility related traits in tall fescue. ASA, CSSA, and SSSA Annual Meeting. Nov. 6-9, Phoenix, AZ. USA.
 9. **Talukder**, S.K. and M.C. Saha. 2016. Understanding summer dormancy for persistence of tall fescue in hot and dry conditions. International Symposium on Molecular Breeding of Forage and Turf (MBFT 2016). August 15-19, Lanzhou, china.
 10. **Talukder**, S.K., J. Chang, L. Sun, S. Mukherjee, K. Chekhovskiy, Y. Tang and M.C. Saha. 2016. Transcriptomics study in tall fescue for summer dormancy. International Plant & Animal Genome XXIV conference. Jan. 9-13, San Diego, CA. USA.
 11. Saha, M.C., S.K. **Talukder**, P. Azhaguvel, S. Mukherjee and Y. Tang. 2016. A composite approach to study drought tolerance in tall fescue. International Plant & Animal Genome XXIV conference. Jan. 9-13, San Diego, CA. USA.
 12. **Talukder**, S.K., S. Bhamidimarri, R.M. Dierking, K. Chekhovskiy and M.C. Saha. 2015. Mapping QTL for traits related to summer dormancy in tall fescue. ASA, CSSA, and SSSA Annual Meeting. Nov. 15-18, Minneapolis, MN. USA.
 13. **Talukder**, S.K., Black J. L. and M.C. Saha. 2015. In vitro screening for water use efficiency in tall fescue. Workshop on F-365: Planting the roots for year-round grazing in the southern great plain. Nov. 5-7, Noble Research Institute, Ardmore, OK. USA.
 14. Black, J.L., S.K. **Talukder**., K. Chekhovskiy and M.C. Saha. 2015. Controlling water loss by multilayered media in small cones to simulate prolonged drought progression in tall fescue under greenhouse condition. 5th Annual Meeting: National Association of Plant Breeders. July 28-30, Pullman, WA. USA.
 15. **Talukder**, S.K., J.L. Black, K. Chekhovskiy and M.C. Saha. 2015. In vitro phenotyping of tall fescue for summer dormancy. Annual Meeting: National Association of Plant Breeders. July 28-30, Pullman, WA. USA.
 16. **Talukder**, S.K., P. Azhaguvel, S. Mukherjee, K. Chekhovskiy, Y. Tang and M.C. Saha. 2015. De novo assembly and molecular marker development in tall fescue using RNA-Seq data. International Plant & Animal Genome XXIII conference. Jan. 10-14, San Diego, CA. USA.
 17. Tian, B., S.K. **Talukder**, H. Lee, A.K. Fritz and H.N. Trick. 2015. Improving wheat yield under heat stress by expressing putative thermostable starch synthase genes. International Plant & Animal Genome XXIII conference. Jan. 10-14, San Diego, CA. USA.
 18. **Talukder**, S.K., P. Azhaguvel, K. Chekhovskiy, J. Black and M.C. Saha. 2014. Tall fescue morphotype differentiation using chloroplast DNA sequence variation and SSR diversity. ASA, CSSA, and SSSA Annual Meeting. Nov. 2-5, Long beach, CA. USA.
 19. Trick,H., B. Tian, S.K. **Talukder**, H Lee and A.K. Fritz. 2015. Improving wheat yield under heat stress by expressing putative thermostable starch synthase genes. *In Vitro Cellular & Developmental Biology Conference*. New York. Volume 51: 36. USA.
 20. Trick, H., B. Tian, S.K. **Talukder**, H Lee and A.K. Fritz. 2014. Expression of thermostable starch synthase genes in wheat improves grain fill at elevated temperatures. *In Vitro Cellular & Developmental Biology Conference*. New York. Volume 50: 54. USA.
 21. **Talukder**, S.K., H. Wang, J. Black, K. Chekhovskiy and M.C. Saha. 2014. In vitro phenotyping assays to discriminate Mediterranean and Continental tall fescue morphotypes. Southern Pasture & Forage Crop Improvement Conference. Apr. 21-23, Biloxi, MS. USA.

22. **Talukder**, S.K., P. Azhaguvel, S. Mukherjee, K. Chekhovskiy, T. Yuhong and M.C. Saha. 2014. Characterization of water stress related transcriptome in tall fescue. International Plant & Animal Genome XXII conference. Jan. 11-15, San Diego, CA. USA.
23. **Talukder**, S.K., A. Adeyanju, J. Poland, P.V.V. Prasad and A. Fritz. 2012. Cytoplasmic effect of wheat for high temperature tolerance. ASA, CSSA, and SSSA Annual Meeting. Oct. 21-24, Cincinnati, OH. USA.
24. **Talukder**, S.K., M.A. Babar, K. Vijayalakshmi, J. Poland and A. Fritz. 2012. Studying post anthesis heat tolerance in wheat and mapping QTLs for related traits. ASA, CSSA, and SSSA Annual Meeting. Oct. 21-24, Cincinnati, OH. USA.
25. Babar, M.A., A.K. Fritz, K. Vijayalakshmi, S.K. **Talukder**, and Z. Riztic. 2008. Genetic correlation, correlated response and indirect assessment of photosynthetic and cell-membrane damages by using spad-chlorophyll content under post-anthesis high-temperature stress in wheat. The 2008 Joint ADSA-ASAS Annual Meeting, July 7-11, Indianapolis, Indiana. USA.
26. Hassan, L. and S.K. **Talukder**. 2004. Molecular gene transfer for the generation of salt tolerant rapeseed varieties in Bangladesh. 4th International Crop Science Congress. Sept. 26 -Oct. 01, Brisbane, Australia.
27. **Talukder**, S.K., L. Hassan, M.A. Quddus, M.A. Khan, S.A. Raffi and M.A Hossain. 2004. Genetic transformation in Brassica campestris and Brassica napus varieties. 5th International Conference of Bangladesh association of Plant Tissue Culture and Biotechnology. Dec. 4-6, Dhaka, Bangladesh.
28. Nazim-Ud-Dowla, M.A.N., L. Hassan, S.K. **Talukder**, A.B.M.A.H.K. Robin and R. Dey. 2004. Biotechnology for Indica rice improvement. 5th International Conference of Bangladesh Association of Plant Tissue Culture and Biotechnology. Dec. 4-6, Dhaka, Bangladesh.
29. Khan, M.A., L. Hassan, S.K. **Talukder**, M.A. Hossain and M.S.H. Khan. 2004. In vitro regeneration potentiality of Brassica species. 5th International Conference of Bangladesh Association of Plant Tissue Culture and Biotechnology. Dec. 4-6, Dhaka, Bangladesh.
30. Islam, M.M., L. Hassan, S.K. **Talukder**, M.A.N. Nazim-Ud-Dowla and M.A. Hossain. 2004. Regeneration potentiality of four tobacco cultivars. 5th International Conference of Bangladesh Association of Plant Tissue Culture and Biotechnology. Dec. 4-6, Dhaka, Bangladesh.

Annual Report

1. Rice Breeding Progress Report. 2019. California Cooperative Rice Research Foundation, Rice Experiment Station. Biggs, California. (Wrote introductory and long grain section of the report).
2. Rice Breeding Progress Report. 2018. California Cooperative Rice Research Foundation, Rice Experiment Station. Biggs, California. (Wrote introductory and long grain section of the report).
3. Forage 365 initiative: Water Use Efficiency (WUE) Progress Report of Tall fescue. 2017. Noble Research Institute, Ardmore, Oklahoma. (Wrote tall fescue component of the report).
4. Forage 365 initiative: Water Use Efficiency (WUE) Progress Report of Tall fescue. 2016. Noble Research Institute, Ardmore, Oklahoma. (Wrote tall fescue component of the report).
5. Forage 365 initiative: Water Use Efficiency (WUE) Progress Report of Tall fescue. 2015. Noble Research Institute, Ardmore, Oklahoma. (Wrote tall fescue component of the report).

Manuscript Under Process

1. **Talukder**, S.K., K. Chekhovskiy, J. Black and M. C. Saha. Semi-high throughput *in vitro* screening method to enhance water use efficiency in tall fescue.

Grant Proposal/funding approval

1. Co-Leads: Malay Saha, Michael Udvardi, Maria Monteros; Co-PIs: Rick Nelson, Lloyd Sumner, Carolyn Young, James Rogers, Mike Trammell; NF Collaborators: Yun Kang, Christy Motes, **Shyamal Talukder**, Brian Motes, Yuhong Tang, David Huhman, David McSweeney. Title “Improving Water Use Efficiency, Drought Tolerance and Persistence of Tall Fescue and Alfalfa”. The tall fescue research component of the project was developed by Malay Saha and Shyamal Talukder. The project was funded with \$500,000.00 for tall fescue component for three years (2015- 2017) and I continued as postdoctoral fellow to accomplish the project goal. The project was the part of NRI-365 initiative, which comprised multiple research components. Postdoctoral fellows were not allowed to be a co-principle investigator in the NRI-project. I was listed as a collaborator in that proposal.
2. **Shyamal Krishna Talukder** and Malay Saha. Title “Variability of chloroplast genome sequence between Mediterranean and Continental tall fescue” Submitted to Noble Research Institute to support a summer research scholar in 2015. The project got a positive scientific review, but research scholar was not granted due to time limitation. However, NRI committee approved the project and covered research related cost of the project (\$10,000).
3. Approval of instrument cost for the laboratory, \$88,230 (listed below). I prepared proposals with justification to buy the instruments for the laboratory during 2014-2017.

List of purchased instrument

Name of the instrument	Manufacturer/ supplier	Unit Price (\$)	Total unit	Total prize
Root imager (CI 600)	CID Bio Science	15140.00	1	15,140.00
Root Snap (CI 690)	CID Bio Science	3700.00	1	3,700.00
Digital Plant canopy imager (CI 110)	CID Bio Science	7300.00	1	7,300.00
Dark adaptation clips for OS-30P chlorophyll fluorometer	Opti science	10.00	800	8,000.00
Handheld photosynthesis system	CID Bio Science	19,950.00	1	19,950.00
Vapor pressure osmometer (Vapro 5600)	ELITechGroup	8295.00	2	16,590.00
Tube for Root imager	CID Bio Science	135.00	130	17,550.00
			Total	88,230.00

Honors and Awards

1. Leadership program (2017), Noble Research Institute, Oklahoma.
2. Carl and Betty C. Overley Scholarship (2012), Department of Agronomy, Kansas State University (KSU).
3. Bernard E. and Estelle L. Foote Scholarship (2012), Department of Agronomy, KSU.
4. Bernard E. and Estelle L. Foote Scholarship (2011), Department of Agronomy, KSU.
5. John H. Parker Scholarship (2010), Department of Agronomy, KSU.
6. Louis P. and Elva G. Reitz Scholarship (2009), Department of Agronomy, KSU.
7. National Science and Technology Awards (2002), Ministry of Science and Technology, Bangladesh.

Invited Presentation

1. Title “Small Grain Breeding and Genetics: Vision for sustainable genetic gain, variety release and research” March 11, 2020. The School of Plant and Environmental Sciences, Virginia Tech University, Blacksburg, Virginia.
2. Title “Next Generation Breeding to Mitigate the Forthcoming Challenges”- November 6, 2017. Rice Experiment Station. California Cooperative Rice Research Foundation, Inc. Biggs, California 95917.
3. Title "Genomics Assisted Sustainable Breeding for Minor Crop Improvement" April 12, 2017, Department of Agronomy and Plant Genetics, University of Minnesota.
4. Title “Sustainable vegetable breeding: challenges, prospects and future direction”- November 21, 2016. College of Agriculture, Food Science & Sustainable Systems, Kentucky State University.
5. Title “Heat tolerance studies for wheat improvement”. January 16, 2013. NRI, Ardmore, Oklahoma

Institutional presentation

1. Title “Towards Next Generation Breeding for Rice Improvement” January 16, 2020. Board of Directors Meeting, RES, Biggs, California.
2. Title “RES rice breeding and potential integration of genomic selection into the program” January 10, 2019. Board of Directors Meeting, RES, Biggs, California.
3. Title “Enhancing water use efficiency in tall fescue: a forage 365 project” January 9, 2017. NRI, Ardmore, Oklahoma.
4. Title “Forage 365 initiatives: Water use efficiency in tall fescue” March 7, 2016. NRI, Ardmore, Oklahoma.
5. Title “QTL identification for summer dormancy related traits in tall fescue” November 15, 2015. NRI, Ardmore, Oklahoma.
6. Title “In vitro screening for water use efficiency in tall fescue”, November 6, 2015. NRI, Ardmore, Oklahoma.
7. Title “Characterization of drought related transcriptome in tall fescue” March 3, 2014. NRI, Ardmore, Oklahoma.
8. Title “Phenotyping and genotyping tall fescue for summer dormancy and drought”, January 19, 2014. NRI, Ardmore, Oklahoma.

Volunteered presentation

1. Title “Maintaining lab and greenhouse safety” – a safety presentation for NRI” August 31, 2015. NRI, Ardmore, Oklahoma.
2. Title “Poison Ivy: Toxin under a beautiful mask” a safety presentation for summer. February 17, 2016. NRI, Ardmore, Oklahoma.

Student Mentoring Experience

1. Levi Pittman (Summer intern with me from Southern Oklahoma Technology Center, Summer, 2017).
2. Alyssa Cox (Summer intern with me from Southern Oklahoma Technology Center, Summer, 2016).
3. Olivia Adabah (Summer intern with me from Southern Oklahoma Technology Center, Summer, 2015).
4. Md. Asaduzzaman Prodhan, (Mentored MS research and thesis preparation in the department of genetics and plant breeding, BAU in 2005-2006).
5. Sharmistha Ghoshal (Mentored MS research and thesis preparation in the department of Genetics and Plant Breeding, BAU in 2005-2006).
6. Shipra Rani Mondol, (Mentored MS research and thesis preparation in the department of Biotechnology, BAU in 2004-2005)
7. Mahbulul Alam Khan (Mentored MS research and thesis preparation in the department of Biotechnology, BAU in 2003-2004).
8. Mirza Nazim-Ud-Dowla (Mentored MS research and thesis preparation in the department of Genetics and Plant Breeding, BAU in 2003-2004).
9. Ten undergraduate summer students' workers in Kansas State University from 2008 to 2012 during field harvest and selection.

Employee Supervised

1. Davinder Singh - Plant Breeder Assistant (Rice Experiment Station, California).
2. Temporary workers during planting and harvesting (Rice Experiment Station, California).
3. Konstantin Chekhovskiy - Research associate (supervised at Noble Research Institute).
4. Jennifer Black - Research associate (supervised at Noble Research Institute).
5. Melissa McMahon- Research technician (supervised at Noble Research Institute).
6. Weihong Dong- Research technician (supervised at Noble Research Institute).

Peer Reviewing Activity

- ✓ Crop Science
- ✓ Crop and pasture Science
- ✓ Agriculture
- ✓ Journal of Crop Improvement
- ✓ Agronomy Journal
- ✓ Plant Cell Reports
- ✓ PLOS One
- ✓ Genes
- ✓ Scientific Reports

Volunteering as Judge

- ✓ Oklahoma State Science Fair, 2013-2017.
- ✓ Poster competition in the ASA, CSSA, and SSSA Annual Meeting, 2015.
- ✓ Poster competition in the NAPB annual meeting, 2015.

Professional Membership

- ✓ The American Association for the Advancement of Science
- ✓ Crop Science Society of America
- ✓ American Society of Agronomy
- ✓ Soil Science Society of America
- ✓ National Association of Plant Breeders
- ✓ Krishibid Institution, Bangladesh
- ✓ Bangladesh Association for Biotechnology, Bangladesh

LinkedIn Profile

<https://www.linkedin.com/in/shyamal-talukder-bb373157>