

## *Curriculum Vitae – M. Anowarul Islam*

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- Ph.D.** Agriculture (Agronomy), University of Sydney, Australia, 2003  
*Title of the dissertation:*  
Responses of accessions of *Austrodanthonia* spp. to factors associated with soil acidity. Ph.D. dissertation. The University of Sydney, Australia. Available at <http://ses.library.usyd.edu.au/handle/2123/502> (verified December 4, 2022; file viewed and downloaded by worldwide viewers = 8,852).
- M.S.** Agronomy-Soil Fertility, Institute of Postgraduate Studies in Agriculture, Bangladesh, 1996  
*Title of the thesis:*  
Growth and yield response of onion to different sources of potash and their fertilization method. M.S. thesis. Institute of Postgraduate Studies in Agriculture, Bangladesh.
- B.S.** Agriculture (major subjects-Agronomy, Crop Science, Soil Science, Animal Husbandry, Genetics and Plant Breeding), Bangladesh Agricultural University, 1990

### **Professional and Academic Experience:**

- Jul 2019-present **Professor and State Extension Specialist**, Department of Plant Sciences, University of Wyoming, Laramie, Wyoming
- Jul 2014-Jun 2019 **Associate Professor and State Extension Specialist**, Department of Plant Sciences, University of Wyoming, Laramie, Wyoming
- Mar-Aug 2016 **Visiting Professor**, Lethbridge Research Center, Agriculture and Agri-Food Canada, Lethbridge, Alberta, Canada
- Jun-Aug 2015 **Visiting Professor**, Field Science Center for Northern Biosphere, Hokkaido University, Sapporo, Hokkaido, Japan
- Jun 2008-Jun 2014 **Assistant Professor and State Extension Specialist**, Department of Plant Sciences, University of Wyoming, Laramie, Wyoming
- Oct 2005-May 2008 **Postdoctoral Researcher, Forage Agronomist**, The Samuel Roberts Noble Foundation (Noble Research Institute), Ardmore, Oklahoma
- Dec 2004-Oct 2005 **Postdoctoral Research Fellow**, Department of Agronomy, University of Sydney, Sydney, Australia
- Nov 2002-Nov 2004 **Postdoctoral Research Fellow**, Laboratory of Grassland Ecology and Systems, University of Miyazaki, Miyazaki, Japan
- Sep 1998-Nov 2002 **Research Fellow**, Department of Primary Industries, NSW, Australia
- Mar 2000-Dec 2000 **Research Assistant** (Part-time), Department of Primary Industries, NSW, Australia

- Nov 1996-Sep 1998 **Teaching Assistant**, Department of Crop Sciences, University of Sydney, Sydney, Australia
- Aug 1990-Feb 1996 **Research Scientist**, Bangladesh Agricultural Research Institute, Dhaka, Bangladesh
- Jan 1990-Aug 1990 **Junior Executive Officer (Agronomy)**, Bangladesh Agricultural Development Corporation, Dhaka, Bangladesh

### **Awards and Honors:**

- *President*, Western Society of Crop Science, 2021-present
- Nominated for Distinguished Graduate Faculty Mentor Award, University of Wyoming, 2022.
- Received *Outstanding Research Achievement Award* of Wyoming Agricultural Experiment Station, 2021
- *President-Elect*, Western Society of Crop Science, 2019-2021
- *Associate Editor*, Agronomy Journal, 2018-2022
- *Guest Editor*, Sustainability, Special Issue (an International Journal; Impact Factor 3.251), Agroecology: Principles and Application for Efficient and Sustainable Agricultural Production, 2017-2019
- Nominated for *Outstanding RSO Advisor Award* for exceptional work in the Bangladesh Students' Association at the University of Wyoming, 2018
- Received *Outstanding Extension Educator Award* in the College of Agriculture and Natural Resources and University of Wyoming Extension, University of Wyoming, 2017
- Visiting Professor, Lethbridge Research Center, Agriculture and Agri-Food Canada, Lethbridge, Alberta, Canada, 2016
- *President*, Gamma Sigma Delta UW Chapter, the Honor Society of Agriculture, 2015-16
- Visiting Professor and Fellowship Award, Hokkaido University, Japan, 2015
- Nominated for the Wyoming Agricultural Experiment Station 2014 Early Career Research Achievement Award, University of Wyoming, 2014
- The Northwest Area Educator Awards, Five Years in Extension Recognition, University of Wyoming Extension, 2013
- JSPS BRIDGE Fellowship Award, Japan Society for the Promotion of Science (JSPS), Tokyo, Japan, 2013-2014.
- Early Career Service Award for Professional Excellence in Extension and Research, Epsilon Sigma Phi (ESP), University of Wyoming, 2011
- Australian Academy of Science and Japanese Society for the Promotion of Science Award (2002-2004)
- UPA (University Postgraduate Award) - University of Sydney, Australia (1998-2002)
- James Kentley Memorial Scholarship - The University of Sydney, Australia (2000)
- G.H.S. and I.R. Lightoller Scholarship - The University of Sydney, Australia (2000)
- JICA (Japan International Cooperation Agency) Merit Scholarship - Institute of Postgraduate Studies in Agriculture, Bangladesh (1994-1996)
- University Merit Scholarship - Bangladesh Agricultural University (1984-1989)
- Faculty Scholarship - Bangladesh Agricultural University (1984-1988)

## Professional Memberships:

- American Society of Agronomy
- Crop Science Society of America
- Soil Science Society of America
- American Forage and Grassland Council
- Western Society of Crop Science
- US-JSPS (United States-Japan Society for the Promotional Science)
- Epsilon Sigma Phi (ESP) (Extension Professionals' Organization)
- Gamma Sigma Delta, the Honor Society of Agriculture

## Publications:

### **Peer-Reviewed Journal Articles (46 total; 1 published in 2021; 4 published 2020; 2 published in 2019 and 6 published in 2018; \*graduate student):**

46. Carr, P.M., Bell, J.M., Boss, D.L., DeLaune, P., Eberly, J.O., Edwards, L., Fryer, H., Graham, C., Holman, J., **Islam, M.A.**, Liebig, M., Miller, P.R., Obour, A., Xue, Q. 2021. Annual forage impacts on dryland wheat farming in the Great Plains. *Agronomy Journal*. doi: 10.1002/agj2.20513.
45. Khatiwada, B., Acharya, S.N., Larney, F.J., Lupwayi, N.Z., Smith, E.G., **Islam, M.A.**, Thomas, J.E., and Poudel, H.P. 2020. Pasture rejuvenation using sainfoin and cicer milkvetch in western Canada. *Agronomy Journal*. doi: 10.1002/agj2.20466.
44. Khatiwada, B., Acharya, S.N., Larney, F.J., Lupwayi, N.Z., Smith, E.G., **Islam, M.A.**, and Thomas, J.E. 2020. Benefits of mixed grass–legume pastures and pasture rejuvenation using bloat-free legumes in western Canada: a review. *Canadian Journal of Plant Science*. 100:463-476. doi.org/10.1139/cjps-2019-0212.
43. Nilahyane, A.\*, **Islam, M.A.**, Mesbah, A.O., Herbert, S.K., and Garcia y Garcia, A. 2020. Growth, water productivity, nutritive value, and physiology responses of silage corn to water stress. *Agronomy Journal*. 112:1625-1635. doi: 10.1002/agj2.20015.
42. **Islam, M.A.** and Adjesiwor, A.T.\* 2020. Nitrogen fertilization in tall fescue: Productivity, agronomic efficiency and relative profitability. *Grassland Science*. 66:67–73. doi: 10.1111/grs.12261.
41. Homer, A. \*, **Islam, M.A.**, Krall, J.M., Nachtman, J.J., and Groose, R.W. 2019. Registration of ‘WyoWinter’ Feed Pea for the US Central Great Plains. *Journal of Plant Registrations*. 13:128-133. doi:10.3198/jpr2018.07.0047crc.
40. Aryal, P.\* and **Islam, M.A.** 2019. Establishment of forage kochia in seeding mixtures with perennial grasses. *Grassland Science*. 65:147–154. doi: 10.1111/grs.12228.
39. Aryal, P.\* and **Islam, M.A.** 2018. Effect of forage kochia on seedling growth of cheatgrass (*Bromus tectorum*) and perennial grasses. *Invasive Plant Science and Management*. 11:201–207. doi: 10.1017/inp.2018.27.
38. **Islam, M.A.** and Ashilenje, D.\* 2018. Diversified forage cropping systems and their implications on resilience and productivity. *Sustainability*. 10, 3920; doi:10.3390/su10113920.

37. Nilahyane, A.\*, **Islam, M.A.**, Mesbah, A.O., and Garcia y Garcia, A. 2018. Effect of irrigation and nitrogen fertilization strategies on silage corn grown in semi-arid conditions. *Agronomy*. 8, 208; doi:10.3390/agronomy8100208.
36. Dhakal, D.\* and **Islam, M.A.** 2018. Grass-legume mixtures for improved soil health in cultivated agroecosystem. *Sustainability*. 10, 2718; doi:10.3390/su10082718.
35. Nilahyane, A.\*, **Islam, M.A.**, Mesbah, A.O., and Garcia y Garcia, A. 2018. Evaluation of silage corn yield gap: An approach for sustainable production in the semi-arid region of USA. *Sustainability*. 10, 2523; doi:10.3390/su10072523.
34. Tracy, B.F., Foster, J.L., Butler, T.J., **Islam, M.A.**, Toledo, D., and Vendramini, J.M.B. 2018. Resilience in Forage and Grazinglands. *Crop Science*. 58:31–42. doi: 10.2135/cropsci2017.05.0317.
33. Adjesiwor, A.T.\*, **Islam, M.A.**, Zheljzakov, V.D., Ritten, J.P., and Garcia y Garcia, A. 2017. Grass-legume seed mass ratios and nitrogen rates affect forage accumulation, nutritive value, and profitability. *Crop Science*. 57:2852-2864. doi:10.2135/cropsci2016.09.0776.
32. **Islam, M.A.**, Obour, A.K., Rule, D., Bandara, M., and Acharya, S. 2017. Forage and seed production potential, nutritive value, and fatty acid profile of fenugreek. *Crop Science*. 57:1764–1772. doi: 10.2135/cropsci2016.08.0685.
31. Adjesiwor, A.T.\* and **Islam, M.A.** 2016. Rising nitrogen fertilizer prices and projected increase in maize ethanol production: the future of forage production and the potential of legumes in forage production systems. *Grassland Science* 62:203-212. doi: 10.1111/grs.12130.
30. Tracy, B.F., Albrecht, K., Flores, J., Hall, M., **Islam, M.A.**, Jones G., Lamp, W., MacAdam, J.W., Skinner, H., and Teutsch, C. 2016. Evaluation of alfalfa-tall fescue mixtures across multiple environments. *Crop Science* 56:2026-2034. doi: 10.2135/cropsci2015.09.0553.
29. Sintim, H.Y., Adjesiwor, A.T.\*, Zheljzakov, V.D., **Islam, M.A.**, and Obour, A.K. 2016. Nitrogen application in sainfoin under rain-fed conditions in Wyoming: Productivity and cost implications. *Agronomy Journal* 108:294–300. doi: 10.2134/agronj2015.0317.
28. **Islam, M.A.**, Obour, A.K., Saha, M.C., Nachtman, J.J., Cecil, W.K., and Baumgartner, R.E. 2013. Grain yield, forage yield, and nutritive value of dual-purpose small grains in the Central High Plains of the USA. *Crop Management* doi: 10.1094/CM-2012-0154-RS.
27. Tracy, B., Albrecht, K., Flores, J., Hall, M., **Islam, M.A.**, Jones, G., Lamp, W., MacAdam, J., Skinner, H., and Teutsch, C. 2013. Forage yield, weed suppression and fertilizer nitrogen replacement value (FNRV) of alfalfa-tall fescue mixtures. *Grassland Science in Europe*. 18:192-194.
26. **Islam, M.A.**, Obour, A.K., Krall, J.M., Cecil, J.T., and Nachtman, J.J. 2013. Performance of turfgrass under supplemental irrigation and rain-fed conditions in the Central Great Plains of USA. *Grassland Science*, 59, 111-119.
25. **Islam, M.A.**, Obour, A.K., Saha, M.C., Nachtman, J.J., and Baumgartner, R.E. 2013. Small grains have forage production potential and nutritive value in Central High Plains of Wyoming. Online. *Forage and Grazinglands* doi:10.1094/FG-2013-0121-02-RS.
24. Kimura, E.\* and **Islam, M.A.** 2012. Seed scarification methods and their use in forage legumes. *Research Journal of Seed Science*, 5, 38-50.
23. Interrante, S.M., Muir, J.P., **Islam, M.A.**, Maas, A.L., Anderson, W.F., and Butler, T.J. 2011. Establishment, agronomic characteristics, and dry matter yield of rhizoma peanut genotypes in cool environments. *Crop Science*, 51, 2256-2261.

22. Interrante, S.M., Singh, R., **Islam, M.A.**, Stein, J.D., Young, C.A., and Butler, T.J. 2011. Effectiveness of *Sinorhizobium* inoculants on annual medics. *Crop Science*, 51, 2249-2255.
21. **Islam, M.A.**, Biermacher, J.T., Interrante, S.M., Reuter, R.R., Hopkins, A.A., Cook, B.J., Bouton, J.H., and Butler, T.J. 2011. Production and economics of grazing rye–annual ryegrass and tall fescue systems. *Agronomy Journal*, 103, 558-564.
20. Biermacher, J., Reuter, R.R., Cook, B.J., **Islam, M.A.**, Hopkins, A., Bouton, J.H., and Butler, T.J. 2009. Economic feasibility of stocker cattle grazing tall fescue infected with a novel endophyte in the Southern Great Plains. *Journal of Animal Science*, 87 (E-Suppl. 2), 573.
19. Hirata, M., **Islam, M.A.**, Harada, E., Furuya, M., and Sakou, A. 2008. Sward structure and herbage quality, production and utilisation of adjacent monocultures of centipede grass and bahia grass grazed by cattle. *Tropical Grasslands*, 42, 202-213.
18. Biermacher, J.T., **Islam, M.A.**, Butler, T., Reuter, R., Cook, B., Hopkins, A., Bouton, J. 2008. Economic potential of tall fescue infected with a novel endophyte in the winter forage stocker grazing enterprise. *Journal of Agricultural and Resource Economics*, 33 (3), 494-494.
17. Butler, T. J., **Islam, M. A.**, and Muir, J. P. 2008. Establishing cool-season perennial grasses into former annual grass pastures in the southern Great Plains. Online. *Forage and Grazinglands* doi:10.1094/FG-2008-0911-01-RS.
16. Butler, T.J., Muir, J.P., **Islam, M.A.**, and Bow J.R. 2007. Rhizoma peanut yield and nutritive value are influenced by harvest technique and timing. *Agronomy Journal*, 99, 1559-1563.
15. **Islam, M.A.**, Dowling, P.M., Milham, P.J., Campbell, L.C., and Jacobs, B.C. 2007. Evaluation of *Austroanthonia* accessions for acid tolerance and growth potential. *International Journal of Agricultural Research*, 2, 849-861.
14. **Islam, M.A.**, Dowling, P.M., Milham, P.J., Campbell, L.C., Jacobs, B.C., and Garden, D.L. 2006. Ranking acidity tolerance and growth potential of *Austroanthonia* accessions. *Grassland Science*, 52, 127-132.
13. **Islam, M.A.** and Hirata, M. 2005. Centipedegrass (*Eremochloa ophiuroides* (Munro) Hack.): Growth behavior and multipurpose usages. *Grassland Science*, 51, 183-190.
12. **Islam, M.A.** and Hirata, M. 2005. Leaf appearance, death and detachment, and tillering in centipedegrass (*Eremochloa ophiuroides* (Munro) Hack.) in comparison with bahiagrass (*Paspalum notatum* Flüggé): A study at a small sod scale. *Grassland Science*, 51, 121-127.
11. **Islam, M.A.**, Hirata, M., and Bao, G. 2004. Leaf dynamics of centipedegrass (*Eremochloa ophiuroides* (Munro) Hack.) in comparison with bahiagrass (*Paspalum notatum* Flüggé): a preliminary study at a small sod scale. *Grassland Science*, 50, 88-89.
10. **Islam, M.A.**, Hirata, M., and Bao, G. 2004. Sward structure and leaf dynamics of centipedegrass (*Eremochloa ophiuroides* (Munro) Hack.): a study at a pasture scale. *Grassland Science*, 50, 90-91.
9. Bao, G., Hirata, M., and **Islam, M.A.** 2004. Effects of defoliation frequency on stolon development in centipedegrass. *Grassland Science*, 50, 96-97.
8. Bao, G., Hirata, M., and **Islam, M.A.** 2004. Effects of N and K application on gap colonization by centipedegrass. *Grassland Science*, 50, 98-99.
7. **Islam, M.A.**, Milham, P.J., Dowling, P.M., Jacobs, B.C., and Garden, D.L. 2004. Improved procedures for adjusting soil pH for pot experiments. *Communications in Soil Science and Plant Analysis*, 35, 25-37.

6. **Islam, M.A.**, Dowling, P.M., Garden, D.L., and Milham, P.J. 2003. *Austrodanthonia* - a productive pasture genus: a brief review. 2. Growth habit, nutritive value and production. *Grassland Science*, 49, 36-37.
5. **Islam, M.A.**, Dowling, P.M., Garden, D.L., and Milham, P.J. 2003. *Austrodanthonia* - a productive pasture genus: a brief review. 1. Occurrence and importance. *Grassland Science*, 49, 34-35.
4. **Islam, M.A.** 1999. Growth and yield response of onion to different sources of potassium and application methods. I. Growth behaviour. *Thai Journal of Agricultural Science*, 32, 391-400.
3. **Islam, M.A.** 1999. Growth and yield response of onion to different sources of potassium and application methods. II. Yield attributes and potassium uptake. *Thai Journal of Agricultural Science*, 32, 443-452.
2. Haque, M.A, Hossain, M.K., Saha, U.K., **Islam, M.A.**, and Islam, M.S. 1996. Response of proso millet (*Panicum miliaceum*) to major and minor nutrients in grey flood-plain soil of Bangladesh. *Indian Journal Agricultural Sciences*, 66, 91-94.
1. **Islam, M.A.**, Saha, U.K., Islam, M.S., and Saha, R.R. 1995. Fertilizing chickpea for high yield with special emphasis on boron and molybdenum in grey floodplain soils of Bangladesh. *Annals of Bangladesh Agriculture*, 5, 43-49.

***Refereed Journal Articles in Progress (Submitted/Internal review/In preparation; \*graduate student):***

***Submitted:***

3. Nilahyane, A.\*, **Islam, M.A.**, Mesbah, A.O., and Garcia y Garcia, A. Response of dry matter yield and nutritive value of corn for silage to irrigation water and nitrogen. *Agricultural Water Management Journal*. (Submitted, in review)
2. **Islam, M.A.** and Adjesiwor, A.T.\* 2022. Dual-purpose tall fescue productivity and profitability as affected by pre-harvest haying time, nitrogen, and cultivar. *Crop Science*. (Submitted, in review)
1. Ashilenje, D.A.\* , **Islam, M.A.**, and Adjesiwor, A.T.\* 2022. Meadow brome-grass-legume mixtures increase forage productivity and economic value. *Crop Science*. (Submitted, in review)

***Internal Review:***

3. Dhakal, D.\*, **Islam, M.A.**, and Giri, A. 2022. Grass-legume mixtures for increased farm income. *American Journal of Agricultural Economics*. (Internal review; will be submitted soon)
2. Baidoo, M.\* and **Islam, M.A.** Alfalfa productivity and yield response to soil potassium as affected by fertilization, cultivar, and harvest management. *Crop Science*. (Internal review; will be submitted soon)
1. Dhakal, D.\* and **Islam, M.A.** Grass-Legume Mixtures for Improved Forage Yield, Forage Quality, and Stand Persistence. *Agronomy Journal*. (Internal review; will be submitted soon)

***In Preparation:***

4. Dhakal, D.\* , **Islam, M.A.**, and Norton, J.B. Soil nitrogen and carbon dynamics under different seeding proportions of perennial grasses and alfalfa. *Soil Science Society of America Journal*. (*Internal review; will be submitted soon*)
3. Ashilenje, D.\* and **Islam, M.A.** Plant community structure and nitrogen dynamics influence forage yield and nutritive value of meadow bromegrass–legume mixtures. *Agronomy Journal*. (*In preparation*)
2. **Islam, M.A.** and Baidoo, M.\* Evaluation of productivity and economic returns of tall fescue-alfalfa mixtures and nitrogen-fertilized tall fescue in the longer term. *Agronomy Journal*. (*In preparation*)
1. **Islam, M.A.** and Baidoo, M.\* Long-term agronomic performance and profitability of fall and spring seeded cool-season perennial grasses. *Agronomy Journal*. (*In preparation*)

***Book Chapter (Refereed; \*graduate student):***

8. **Islam, M.A.** and Baidoo, M.M.\* 2021. Effect of Potassium on Growth and Physiology of Alfalfa. *In: Handbook of Plant and Crop Physiology*, 4<sup>th</sup> Edition (M. Pessarakli, Ed.). pp. 29-39. CRC Press, Taylor & Francis Publishing Company, Florida.
7. **Islam, M.A.** and Obour, A.K. 2021. Drought Physiology of Forage Crops. *In: Handbook of Plant and Crop Physiology*, 4<sup>th</sup> Edition (M. Pessarakli, Ed.). pp. 567-578. CRC Press, Taylor & Francis Publishing Company, Florida.
6. **Islam, M.A.** and Adjesiwor, A. T.\* 2019. Moisture Stress and its Effects on Forage Production Systems. *In: Handbook of Plant and Crop Stress*, 4<sup>th</sup> Edition (M. Pessarakli, Ed.). CRC Press, Taylor & Francis Publishing Company, Florida.
5. **Islam, M.A.** and Nilahyane, A.\* 2019. Water Stress Effects on Growth and Physiology of Corn. *In: Handbook of Plant and Crop Stress*, 4<sup>th</sup> Edition (M. Pessarakli, Ed.). CRC Press, Taylor & Francis Publishing Company, Florida.
4. **Islam, M.A.** and Ashilenje, D.\* 2018. Understanding species traits and biodiversity indices to solve problems associated with legume persistence in cropping systems. *In: Plant Competition in Cropping Systems*, (D. Dunea, Ed.). pp. 23-36. InTechOpen, Rijeka, Croatia. DOI: 10.5772/intechopen.76523. Available at: <https://www.intechopen.com/books/plant-competition-in-cropping-systems/understanding-species-traits-and-biodiversity-indices-to-solve-problems-associated-with-legume-persi>.
3. **Islam, M.A.** and Adjesiwor, A.T.\* 2018. Nitrogen fixation and transfer in agricultural production systems. *In: Nitrogen in Agriculture - Updates*, (Amanullah and S. Fahad. Eds), pp. 95-110. InTechOpen, Rijeka, Croatia. DOI: 10.5772/intechopen.71766. Available at: <https://www.intechopen.com/books/nitrogen-in-agriculture-updates/nitrogen-fixation-and-transfer-in-agricultural-production-systems>.
2. **Islam, M.A.** and Adjesiwor, A.T.\* 2016. Forage Crops and Their Photosynthesis. *In: Handbook of Photosynthesis*, 3rd Edition (M. Pessarakli, Ed.), pp. 465-474. CRC Press, Taylor & Francis Publishing Company, Florida.
1. **Islam, M.A.** and Obour, A.K. 2014. Drought Physiology of Forage Crops. *In: Handbook of Plant and Crop Physiology*, 3rd Edition (M. Pessarakli, Ed.), pp. 427-440. CRC Press, Taylor & Francis Publishing Company, Florida.

### ***Book Chapter In Preparation (\*graduate student):***

1. **Islam, M.A.** and Adjesiwor, A.T.\* 2022. Forage Crops and Their Photosynthesis. *In:* Handbook of Photosynthesis, 4<sup>th</sup> Edition (M. Pessarakli, Ed.). CRC Press, Taylor & Francis Publishing Company, Florida. (*In preparation*)

### ***Reviewed Research Reports:***

2. **Islam, M.A.**, Dowling, P.M., Milham, P.J., Campbell, L.C., and Garden, D.L. 2002. Tolerance of *Austrodanthonia* spp. to factors associated with soil acidity. In Acid Soil Action (ASA) Research Report. Ed. G. Fenton, pp. 39-43. NSW Agriculture: Wagga Wagga, Australia.
1. **Islam, M.A.** 2000. Acid tolerance and fertility responses of important native grasses for acid soils. In Acid Soil Action Detailed Reports of Southern Region Projects. Eds. B. Scott, B. Schumann, and G. Fenton, pp. 25-26. NSW Agriculture, Wagga Wagga, Australia.

### ***Reviewed Proceedings (\*graduate student):***

19. **Islam, M.A.** and Ashilenje, D.\* 2022. Comparison of Grass-legume Mixtures and Nitrogen Effects on Trace Gas Emission and Soil Microbial Biomass. The 8<sup>th</sup> International Greenhouse Gas & Animal Agriculture Conference, July 31-August 5, 2022, Glasgow, UK. <https://www.22wcss.org>.
18. **Islam, M.A.** and Ashilenje, D.\* 2022. Grass-legume Mixtures and Nitrogen Fertilizers Can Affect Trace Gas Emission and Soil Microbial Biomass. The 8<sup>th</sup> International Greenhouse Gas & Animal Agriculture Conference, June 5-9, 2022, Orlando, Florida. <https://conference.ifas.ufl.edu/ggaa/>.
17. **Islam, M.A.** and Ashilenje, D.\* 2021. Grass-Legume Mixtures for Diversified and Profitable Forage Production. Proceedings of the XXIV International Grassland Congress/XI International Rangeland Congress (Virtual), October 25-29, 2021, Nairobi, Kenya. <https://uknowledge.uky.edu/cgi/viewcontent.cgi?article=4238&context=igc>.
16. **Islam, M.A.**, Baidoo, M.\*, Brummer, J., and Min, D. 2018. Effects of potassium, cultivar, and harvest time on sustainable alfalfa production. Proceedings of the 2<sup>nd</sup> World Alfalfa Congress, November 11-14, 2018, Cordoba, Argentina.
15. **Islam, M.A.** and Aryal, P\*. 2016. Planting Time and Grass Mixtures Affect Forage Kochia Establishment. Proceedings of the International Range Congress, July 3-4, 2016, Saskatchewan, Canada.
14. Adjesiwor, A.T.\* and **Islam, M.A.** 2015. Grass, legumes, and grass-legume mixtures: Yield, nutritive value, and soil water use. Proceedings of the Western Alfalfa and Forage Symposium, December 3-4, 2015, Reno, NV. UC Cooperative Extension, Plant Sciences Department, University of California, Davis, CA.
13. **Islam, M.A.** 2015. Tall Fescue: Forage and Seed Production Economics. Proceedings of the 23<sup>rd</sup> International Grassland Congress, November 20-24, 2015, New Delhi, India. Ed. A.K. Roy. IGC 2015, New Delhi, India.
12. **Islam, M.A.**, Nachtman, J., Obour, A.K., and Edwards, J. 2015. Agronomic Performance of High Value Crops in High Tunnel in Wyoming, USA. Proceedings of the International Conference on Agronomy and Horticulture, August 25-27, 2015, Shanghai, China. ICAH 2015, Shanghai, China.



11. **Islam, M.A.** 2013. Fenugreek has potential to use as a forage crop. Proceedings of the Western Alfalfa and Forage Symposium, December 11-13, 2013, Reno, NV. UC Cooperative Extension, Plant Sciences Department, University of California, Davis, CA.
10. **Islam, M.A.**, and Saha, M.C. 2013. Agronomic traits in tall fescue populations under irrigated and rain-fed conditions. Proceedings of the 22<sup>nd</sup> International Grassland Congress, September 15-19, 2013, Sydney, Australia. Eds. D.L. Michalk, G.D. Millar, W.B. Badgery, and K.M. Broadfoot, pp. 126-128. New South Wales Department of Primary Industry, Orange, Australia.
9. **Islam, M.A.**, Krall, J.M., Cecil, W.K., Nachtman, J.J., Baumgartner, R.E., Bandara, M., and Acharya, S. 2012. Fenugreek: A potential legume for multipurpose use. Proceedings of the 6<sup>th</sup> International Crop Science Congress, August 6-10, 2012. Bento Goncalves, RS, Brazil (International Crop Science Congress).
8. **Islam, M.A.**, Groose, R., Norton, U., Garcia y Garcia, A., Santra, D., Sivanpillai, R., Ritten, J., Norton, J., Paisley, S., and Krall, J. 2012. Legume Adoption Practices in the Central Great Plains of the United States: Economic and Environmental Benefits in Face of Climate Change. Proceedings of the Fourth International Conference on Climate Change, July 12-13, 2012. University of Washington, Seattle, WA (Common Ground Publishing, USA).
7. **Islam, M.A.**, Krall, J.M., Nachtman, J.J., and Baumgartner, R.E. 2011. Assessment of fenugreek for adaptation to southeast Wyoming. Proceedings of the American Forage and Grassland Council Annual Conference, June 12-15, 2011. French Lick, IN (American Forage and Grassland Council).
6. Biermacher, J.T., **Islam, M.A.**, Butler, T.J., Hopkins, A.A., Cook, B.J., Reuter, R., and Bouton, J.H. 2008. Value of tall fescue infected with a novel endophyte in the winter forage stocker grazing enterprise. Selected Paper for Presentation at the Western Agricultural Economics Association's Annual Meeting, July 25-27, 2008. Big Sky, MT. (Western Agricultural Economics Association).
5. **Islam, M.A.**, Butler, T.J., Hopkins, A.A., Biermacher, J.T., Cook, B.J., and Bouton, J.H. 2008. Comparison of cereal rye/annual ryegrass and tall fescue stocker grazing systems in the southern Great Plains of USA. Proceedings of the 5<sup>th</sup> International Crop Science Congress. 13-18 April 2008. Jeju, Korea. (International Crop Science Congress).
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***Extension Bulletins, Newspaper Articles, Popular Extension Articles, Magazine Articles, and Factsheets/Educational Materials (226 total; \*graduate student):***

**Peer-Reviewed Extension Publications (Bulletins)**

14. **Islam, M.A.** and Ashilenje, D.\* 2022. Grass Hay Quality and Storage. *In: Basic Grass Management Strategies for Wyoming Landowners*. University of Wyoming Extension Bulletin, Ed. J. Vardiman, J.S. Thompson, and S.L. Miller. University of Wyoming, Laramie (*In press*).
13. **Islam, M.A.** and Ashilenje, D.\* 2022. Hay Production. *In: Basic Grass Management Strategies for Wyoming Landowners*. University of Wyoming Extension Bulletin, J. Vardiman, J.S. Thompson, and S.L. Miller. University of Wyoming, Laramie (*In press*).
12. Dhakal, D.\* and **Islam, M.A.** 2018. Grass-legume mixtures can maximize farm profits in Wyoming. University of Wyoming Extension Bulletin **B-1329**, Ed. S.L. Miller, pp.1-4, September 2018. University of Wyoming, Laramie. Available at: [http://www.wyoextension.org/agpubs/pubs/b-1329farm\\_profits\\_web.pdf](http://www.wyoextension.org/agpubs/pubs/b-1329farm_profits_web.pdf) (verified September 21, 2018).
11. Dhakal, D.\* and **Islam, M.A.** 2018. Grass-legume mixtures can improve soil health. University of Wyoming Extension Bulletin **B-1328**, Ed. S.L. Miller, pp.1-4, August 2018. University of Wyoming, Laramie. Available at: [http://www.wyoextension.org/agpubs/pubs/b-1328\\_soil\\_health\\_web.pdf](http://www.wyoextension.org/agpubs/pubs/b-1328_soil_health_web.pdf) (verified September 4, 2018).
10. Ashilenje, D.\* and **Islam, M.A.** 2018. Meadow bromegrass-legume mixtures for diversified and profitable hay production in Wyoming. University of Wyoming Extension Bulletin **B-1327**, Ed. S.L. Miller, pp.1-7, July 2018. University of Wyoming, Laramie. Available at: [http://www.wyoextension.org/agpubs/pubs/b-1327\\_brome\\_legume\\_web.pdf](http://www.wyoextension.org/agpubs/pubs/b-1327_brome_legume_web.pdf) (verified August 3, 2018).
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7. Adjesiwor, A.\* and **Islam, M.A.** 2018. Birdsfoot Trefoil: Establishment and Management as Monocultures and Mixtures in Wyoming. University of Wyoming Extension Bulletin **B-1321**, Ed. S.L. Miller, pp.1-7, May 2018. University of Wyoming, Laramie. Available at: <http://www.wyoextension.org/agpubs/pubs/b-1321.pdf> (verified July 12, 2018).
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#### **Peer-Reviewed Extension Publications (Bulletins; In Review/Submitted/Accepted)**

1. Baidoo, M.\* and **Islam, M.A.** 2022. Integrating Potassium, Cultivar, and Harvest Time for Improved Alfalfa Forage Production. University of Wyoming Extension Bulletin. University of Wyoming, Laramie (*In review*).

#### **University of Wyoming Ag Experiment Station Field Days Bulletins (Externally Reviewed)**

106. Shilpakar, C.\* and **Islam, M.A.** 2022. Contribution of Diverse Grass-Legume Mixtures on Long-Term Forage Productivity. 2022 Field Days Bulletin, University of Wyoming Agricultural Experiment Station.
105. Shilpakar, C.\* and **Islam, M.A.** 2022. Performance of Newly Developed Alfalfa and Sainfoin Cultivars under Irrigated and Rain-Fed Conditions. 2022 Field Days Bulletin, University of Wyoming Agricultural Experiment Station.
104. Munkaila, M.\* and **Islam, M.A.** 2022. Productivity of Alfalfa-grass Mixtures under Full and Deficit Irrigation. 2022 Field Days Bulletin, University of Wyoming Agricultural Experiment Station.
103. **Islam, M.A.**, Munkaila, M.\*, Baidoo, M.\*, and Shilpakar, C.\* 2022. Evaluation of Roundup Ready alfalfa for adaptability to Wyoming conditions. 2022 Field Days Bulletin, University of Wyoming Agricultural Experiment Station.

102. Yakubu, A.\*, Shilpakar, C.\*, Munkaila, M.\*, and **Islam, M.A.** 2022. Response of Alfalfa Forage Yield to Micronutrient under Semi-Arid Conditions. 2022 Field Days Bulletin, University of Wyoming Agricultural Experiment Station.
101. Baidoo, M.\* and **Islam, M.A.** 2022. Potassium, Cultivar, and Harvest Time Effect on Productivity of New alfalfa Stands. 2022 Field Days Bulletin, University of Wyoming Agricultural Experiment Station.
100. Baidoo, M.\* and **Islam, M.A.** 2022. Potassium and Harvest Time Effect on Productivity of Old Alfalfa Stand. 2022 Field Days Bulletin, University of Wyoming Agricultural Experiment Station.
99. Baidoo, M.\* and **Islam, M.A.** 2022. Forage yield of alfalfa in response to phosphorus and potassium in association with calcium and magnesium and harvest time. 2022 Field Days Bulletin, University of Wyoming Agricultural Experiment Station.
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96. Baidoo, M.\* and **Islam, M.A.**, 2021. Alfalfa yield response to phosphorus and potassium in relation to calcium, magnesium and harvest time. 2021 Field Days Bulletin, University of Wyoming Agricultural Experiment Station.
95. Baidoo, M.\* and **Islam, M.A.**, 2021. Potassium and harvest time effect on forage production of old alfalfa stands. 2021 Field Days Bulletin, University of Wyoming Agricultural Experiment Station.
94. Shilpakar, C.\* and **Islam, M.A.**, 2021. Effect of grass-legume mixtures on forage productivity and carbon sequestration. 2021 Field Days Bulletin, University of Wyoming Agricultural Experiment Station.
93. Shilpakar, C.\* and **Islam, M.A.**, 2021. Dynamics of soil carbon in forage legume fields under irrigated and rainfed conditions. 2021 Field Days Bulletin, University of Wyoming Agricultural Experiment Station.
92. Munkaila, M.\* and **Islam, M.A.**, 2021. Productivity of alfalfa-grass mixtures. 2021 Field Days Bulletin, University of Wyoming Agricultural Experiment Station.
91. **Islam, M.A.**, Shilpakar, C.\*, and Baidoo, M.\* 2020. Evaluation of roundup ready alfalfa for adaptability on Wyoming conditions. 2020 Field Days Bulletin, University of Wyoming Agricultural Experiment Station.
90. Shilpakar, C.\* and **Islam, M.A.** 2020. Establishment of cool-season perennial grasses and legumes in disturbed environments. 2020 Field Days Bulletin, University of Wyoming Agricultural Experiment Station.
89. **Islam, M.A.**, Baidoo, M.\*, and Shilpakar, C.\* 2020. Evaluating Alfalfa Cultivars for Adaptability and Forage Yield Production under Wyoming's Conditions. 2020 Field Days Bulletin, University of Wyoming Agricultural Experiment Station.
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78. Shilpakar, C.\* and **Islam, M.A.** 2019. Establishment of Cool-Season Perennial Grasses and Legumes in Disturbed Environments. 2019 Field Days Bulletin, University of Wyoming Agricultural Experiment Station, pp. 65-66. Available at <http://www.uwyo.edu/uwexpstn/publications/field-days-bulletin/2019-field-day-bulletin.pdf> (verified March 5, 2020).
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75. **Islam, M.A.**, Baidoo, M.\* and Shilpakar, C.\* 2019. Tall fescue-Alfalfa Mixtures for Improved Forage Production. 2019 Field Days Bulletin, University of Wyoming Agricultural Experiment Station, pp. 80-81. Available at <http://www.uwyo.edu/uwexpstn/publications/field-days-bulletin/2019-field-day-bulletin.pdf> (verified March 5, 2020).
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73. Ashilenje, D.\* and **Islam, M.A.** 2018. Species Composition and Nitrogen Fixation Affect Forage Yield and Nutritive Value of Irrigated Meadow Brome-Legume Mixtures. 2018 Field Days Bulletin, University of Wyoming Agricultural Experiment Station, pp. 154-155. Available at <http://www.uwyo.edu/uwexpstn/publications/field-days-bulletin/2018-field-days-bulletin.pdf> (verified July 12, 2018).
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- <http://www.uwyo.edu/uwexpstn/publications/field-days-bulletin/2018-field-days-bulletin.pdf> (verified July 12, 2018).
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66. Ashilenje, D.\* and **Islam, M.A.** 2017. Changes in plant community structure influence forage yield and quality of irrigated meadow bromegrass-legume mixtures in Wyoming. 2017 Field Days Bulletin, University of Wyoming Agricultural Experiment Station, pp. 126-127. Available at <http://www.uwyo.edu/uwexpstn/publications/field-days-bulletin/2017-field-days-bulletin.pdf> (verified December 24, 2018).
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32. Nilahyane, A.\*, **Islam, M.A.**, Garcia y Garcia, A., and Mesbah, A.O. 2015. Effect of Irrigation and Nitrogen Rates on Yield and Quality of Corn for Silage. Proceedings of the ASA-CSSA-SSSA International Annual Meetings November 15-18 2015. Minneapolis, MN (American Society of Agronomy, Crop Science Society of America, Soil Science Society of America).
31. Nilahyane, A.\*, **Islam, M.A.**, Garcia y Garcia, A., Sylvester, A., and Herbert, S. 2015. Growth and physiological responses of maize to water stress. Proceedings of the ASA-CSSA-SSSA International Annual Meetings November 15-18 2015. Minneapolis, MN (American Society of Agronomy, Crop Science Society of America, Soil Science Society of America).
30. **Islam, M.A.** 2014. Economics of Tall Fescue Production. Proceedings of the Japan Society for the Promotion of Science-US Alumni Association 5<sup>th</sup> Multidisciplinary Science Forum International Annual Meetings 7 November 2014. University of Florida, Gainesville, FL (Japan Society for the Promotion of Science).
29. **Islam, M.A.** 2014. Forage and seed production economics of tall fescue. Proceedings of the ASA-CSSA-SSSA International Annual Meetings November 2-5 2014. Long Beach, CA (American Society of Agronomy, Crop Science Society of America, Soil Science Society of America).
28. Nilahyane, A.\*, Garcia y Garcia, A., and **Islam, M.A.** 2014. Effect of Irrigation and Nitrogen Rates on Yield of Corn for Silage. Proceedings of the ASA-CSSA-SSSA International Annual Meetings November 2-5 2014. Long Beach, CA (American Society of Agronomy, Crop Science Society of America, Soil Science Society of America).
27. **Islam, M.A.**, Saha, M.C., and Wehmeyer, B.A. 2013. Drought stress affects agronomic performance of tall fescue genotypes. Proceedings of the ASA-CSSA-SSSA International Annual Meetings November 3-6 2013. Tampa, FL (American Society of Agronomy, Crop Science Society of America, Soil Science Society of America).
26. Dhakal, D.\* and **Islam, M.A.** 2013. Grass-legume mixtures to mitigate nitrogen need and improve soil properties in the Great Plains of Wyoming. Proceedings of the ASA-CSSA-SSSA International Annual Meetings November 3-6 2013. Tampa, FL (American Society of Agronomy, Crop Science Society of America, Soil Science Society of America).
25. Carter, C.\*, Garcia y Garcia, A., **Islam, M.A.**, and Hansen, K. 2013. Effect of deficit irrigation on water use and water use efficiency of alfalfa. Proceedings of the American Society of Agricultural and Biological Engineers (ASABE) Annual Meetings July 21-24 2013. Kansas city, MO.

24. **Islam, M.A.**, Krall, J.M., Nachtman, J.J., Baumgartner, R.E., Bandara, M., and Acharya, S.N. 2013. Fenugreek may have potential for multipurpose use. Proceedings of the Western Society of Crop Science Annual Meetings June 11-12 2013. Pendleton, OR (Western Society of Crop Science).
23. **Islam, M.A.** and Wehmeyer, B.A. 2013. Biofuel and forage potential of cool-season grass genotypes. Proceedings of the Japan Society for the Promotion of Science-US Alumni Association 3<sup>rd</sup> Multidisciplinary Science Forum International Annual Meetings 1 February 2013. Chapman University, Orange, CA (Japan Society for the Promotion of Science).
22. **Islam, M.A.**, and Violett, R. 2012. Effect of Nitrogen and Clipping on Forage and Seed Yield of Tall Fescue. Proceedings of the ASA-CSSA-SSSA International Annual Meetings October 21-24 2012. Cincinnati, OH (American Society of Agronomy, Crop Science Society of America, Soil Science Society of America).
21. Kimura, E.\*, Krall, J.M., Hess, B.W., and **Islam, M.A.** 2012. Establishing Forage Legumes with Companion Crop. Proceedings of the WSCS Annual Meetings July 11-13 2012. Washington State University, Pullman, WA (Western Society of Crop Science).
20. **Islam, M.A.** and Kimura, E.\* 2011. Scarification method and storage time affect hard seed and germination of forage legumes. Proceedings of the Japan Society for the Promotion of Science-US Alumni Association Multidisciplinary Science Forum International Annual Meetings 28 October 2011. Western Michigan University Kalamazoo, MI (Japan Society for the Promotion of Science).
19. **Islam, M.A.**, Krall, J.M., Nachtman, J.J., and Baumgartner, R.E., Bandara, M., and Acharya, S.N. 2011. Evaluation of fenugreek for forage and seed yield potential in Wyoming. Proceedings of the ASA-CSSA-SSSA International Annual Meetings October 16-19 2011. San Antonio, TX (American Society of Agronomy, Crop Science Society of America, Soil Science Society of America).
18. Kimura, E.\*, Krall, J.M., Hess, B.W., and **Islam, M.A.**, 2011. Effect of scarification method and storage time on hard seed and germination of forage legumes. Proceedings of the Western Society of Soil Science and Western Society of Crop Science Joint Annual Meetings 20-22 June 2011. University of Wyoming, Laramie, WY (Western Societies of Soil Science and Crop Science).
17. **Islam, M.A.**, Krall, J.M., Nachtman, J.J., and Baumgartner, R.E. 2011. Assessment of fenugreek for adaptation to Southeast Wyoming. Proceedings of the American Forage and Grassland Council Annual Conference 12-15 June 2011. French Lick, IN (American Forage and Grassland Council).
16. **Islam, M.A.**, Krall, J.M., Nachtman, J.J., Baumgartner, R.E., and Bandara, M. 2011. Assessment of fenugreek: A new specialty crop. Proceedings of the Japan Society for the Promotion of Science-US Alumni Association Multidisciplinary Science Forum International Annual Meetings 11-12 March 2011. Seattle, WA. (US Japan Society for the Promotion of Science).
15. **Islam, M.A.**, Saha, M.C., Baumgartner, R.E., and Nachtman, J.J. 2010. Seed yield potential of tall fescue germplasm in the Great Plains of Wyoming. Proceedings of the ASA-CSSA-SSSA International Annual Meetings October 31-November 3 2010. Long Beach, CA. (American Society of Agronomy, Crop Science Society of America, Soil Science Society of America).
14. Kimura, E.\*, Krall, J.M., Hess, B.W., and **Islam, M.A.** 2010. Seed scarification and a companion crop may enhance forage legume establishment in the Central West regions of

- USA. Proceedings of the ASA-CSSA-SSSA International Annual Meetings October 31-November 3 2010. Long Beach, CA. (American Society of Agronomy, Crop Science Society of America, Soil Science Society of America).
13. **Islam, M.A.**, Saha, M.C., and Baumgartner, R.E. 2010. Yield performance of cool-season grasses under irrigated and dryland conditions in the Great Plains of Wyoming. Proceedings of the American Forage and Grassland Council Annual Conference 21-23 June 2010. Springfield, MO (American Forage and Grassland Council).
  12. Kimura, E.\* and **Islam, M.A.** 2010. Enhancing forage legumes establishment through seed scarification and use of companion crop in the high plains of Wyoming. Proceedings of the American Forage and Grassland Council Annual Conference 21-23 June 2010. Springfield, MO (American Forage and Grassland Council).
  11. **Islam, M.A.**, Saha, M.C., Baumgartner, R.E., Cecil, J.T., and Nachtman, J.J. 2009. Forage and grain yield potential of small grains in the Great Plains of Wyoming. Proceedings of the ASA-CSSA-SSSA International Annual Meetings 1-5 November 2009. Pittsburgh, PA. (American Society of Agronomy, Crop Science Society of America, Soil Science Society of America).
  10. **Islam, M.A.**, Cecil, J.T., Saha, M.C., Baumgartner, R.E., and Nachtman, J.J. 2009. Small Grains Crops in the Great Plains of Wyoming May Have a Potential as Annual Forages. Proceedings of the Western Society of Crop Science Annual Meetings 22-24 June 2009. Fort Collins, CO (WSCS).
  9. **Islam, M.A.** 2008. Pasture renovation: Value of fertilization and reseeding. Proceedings of the Society for Range Management Wyoming Section and Soil and Water Conservation Society joint annual meeting, 18-20 November 2008. Cheyenne, WY (SRM-SWCS).
  8. **Islam, M.A.** 2008. Pasture renovation: Establishment, reseeding, and interseeding. Proceedings of the Society for Range Management Wyoming Section and Soil and Water Conservation Society joint annual meeting, 18-20 November 2008. Cheyenne, WY (SRM-SWCS).
  7. **Islam, M.A.**, Butler, T.J., Hopkins, A.A., Biermacher, J.T., Cook, B.J., and Bouton, J.H. 2008. Stocker grazing performance of annual versus perennial cool-season grass system. Proceedings of the Geological Society of America (GSA), Soil Science Society of America (SSSA), American Society of Agronomy (ASA), Crop Science Society of America (CSSA), and the Gulf Coast Association of Geological Societies with the Gulf Coast Section of SEPM (GCAGS) International Annual Meetings 5-9 October 2008. Houston, TX (Houston Geological Society).
  6. **Islam, M.A.**, Butler, T.J., and Huo, C. 2008. Effect of different herbicides on switchgrass establishment and growth. Proceedings of the American Forage and Grassland Council and the Society for Range Management Joint Annual Meeting 26-31 January 2008. Louisville, Kentucky (American Forage and Grassland Council and Society for Range Management).
  5. **Islam, M.A.** and Butler, T.J. 2008. Germplasm evaluation of rhizoma peanut for growth and forage potential. Proceedings of the American Forage and Grassland Council and the Society for Range Management Joint Annual Meeting 26-31 January 2008. Louisville, Kentucky (American Forage and Grassland Council and Society for Range Management).
  4. **Islam, M.A.** and Butler, T.J. 2007. Effect of *Rhizobia* inoculants on annual medics. Proceedings of the ASA-CSSA-SSSA International Annual Meetings 4-8 November 2007. New Orleans, LA. (American Society of Agronomy, Crop Science Society of America, Soil Science Society of America).

3. **Islam, M.A.** and Butler, T.J. 2007. Evaluation of wild bean for forage potential. Proceedings of the AFGC Annual Meeting 24-26 June 2007. Pennsylvania State College, PA (American Forage and Grassland Council).
2. **Islam, M.A.**, Butler, T.J., Bushong, J.T., and Rowland, M.W. 2006. Effect of *Rhizobia* inoculants on wild bean. Proceedings of the ASA-CSSA-SSSA International Annual Meetings 12-16 November 2006. Indianapolis, IN. (American Society of Agronomy, Crop Science Society of America, Soil Science Society of America).
1. Bushong, J.T., Butler, T.J., **Islam, M.A.**, and Rowland, M.W. 2006. Annual medics (*Medicago* spp.) response to *Rhizobia* inoculation. Proceedings of the ASA-CSSA-SSSA International Annual Meetings 12-16 November 2006. Indianapolis, IN. (American Society of Agronomy, Crop Science Society of America, Soil Science Society of America).

## Grants, Presentations, Research, and Professional Service:

### Grants:

**Successful: \$14,123,368 (\$10,280,595 in 2021; \$144,891 in 2022)**

<b>USDA Specialty Crop Block Grant Program – Farm Bill (SCBGP-FB), Wyoming Department of Agriculture. 2023-2025</b>	<b>\$96,091</b>
<b>Islam, M.A.</b> Evaluation of Peas in Rotation with Annual Crop for Monitoring Productivity and Soil Health.	
<b>Y Cross Ranch Tuition and Fee Award, COANR, UW. 2022-2023</b>	<b>\$9,800</b>
<b>Islam, M.A.</b> Increasing yield, quality, and economy of alfalfa hay through grass species selection and planting configuration.	
<b>Y Cross Ranch Tuition and Fee Award, COANR, UW. 2022-2023</b>	<b>\$9,800</b>
<b>Islam, M.A.</b> Investigating the impacts of grazing decisions on soil carbon concentrations.	
<b>Y Cross Ranch Tuition and Fee Award, COANR, UW. 2022-2023</b>	<b>\$9,800</b>
<b>Islam, M.A.</b> Evaluation of winter wheat-fallow and/or winter wheat-cover crop-fallow vs. perennial grass/legume system.	
<b>Y Cross Ranch Tuition and Fee Award, COANR, UW. 2022-2023</b>	<b>\$9,800</b>
<b>Islam, M.A.</b> Evaluation of pea in rotation with papa criolla potatoes in Wyoming environments.	
<b>Hatch Multistate, Wyoming Agricultural Experiment Station Competitive Grants Program. 2022-2023</b>	<b>\$4,800</b>
<b>Hatch Multistate, Wyoming Agricultural Experiment Station Competitive Grants Program. 2021-2022</b>	<b>\$4,800</b>
<b>Islam, M.A.</b> Research Support for Optimizing and Characterizing Sustainable Beef Cattle Production in Forage Based Systems on Western Rangelands.	
<b>USDA-NIFA AFRI Sustainable Agricultural Systems (SAS). 2021-2026</b>	<b>\$10,000,000</b>
Picasso, V., Berti, M., <b>Islam, M.A.</b> , et al. Fostering Resilience and Ecosystem Services in Landscapes by Integrating Diverse Perennial Circular Systems.	
<b>Robert Lang Graduate Fellowship, COANR, UW. 2021-2022</b>	<b>\$9,000</b>
<b>Islam, M.A.</b> Increasing yield, quality, and economy of alfalfa hay through grass species selection and planting configuration.	

<b>Y Cross Ranch Tuition and Fee Award, COANR, UW. 2021-2022</b>	<b>\$9,000</b>
Islam, M.A. Investigating the impacts of grazing decisions on soil carbon concentrations.	
<b>Barenbrug USA. 2021-2022</b>	<b>\$3,000</b>
Islam, M.A. Grass genotype/line testing for growth and yield potential.	
<b>Hatch Multistate, Wyoming Agricultural Experiment Station Competitive Grants Program. 2021-2022</b>	<b>\$4,000</b>
Islam, M.A. Research Support for Optimizing and Characterizing Sustainable Beef Cattle Production in Forage Based Systems on Western Rangelands.	
<b>Grassland Oregon Seed. 2021-2022</b>	<b>\$4,000</b>
Islam, M.A. Sainfoin and falcata alfalfa evaluation in Wyoming.	
<b>Hatch/Hatch Multistate, Wyoming Agricultural Experiment Station Competitive Grants Program. 2021</b>	<b>\$45,315</b>
Islam, M.A. 9110 Ag-Probe system with UTV for soil sampling.	
<b>Hatch Multistate, Wyoming Agricultural Experiment Station Competitive Grants Program. 2021</b>	<b>\$9,295</b>
Islam, M.A. Upgrading Near Infrared Reflectance Spectroscopy (NIRS) for Forage Quality Analysis.	
<b>US Department of Energy and Navarro Research and Engineering. 2021-2024</b>	<b>\$150,000</b>
Islam, M.A., Kastens, M., McGraw, J., Holbrook, D., and Heward, T. Regenerate Grazing for Carbon Sequestration in Shirley Basin, Wyoming.	
<b>USDA Specialty Crop Block Grant Program – Farm Bill (SCBGP-FB), Wyoming Department of Agriculture. 2021-2024</b>	<b>\$46,985</b>
Islam, M.A. Forage pea production in rotation with papa criolla potato.	
<b>Y Cross Ranch Tuition and Fee Award, COANR, UW. 2020-2021</b>	<b>\$9,000</b>
Islam, M.A. Increasing yield, quality, and economy of alfalfa hay through grass species selection and planting configuration.	
<b>Grassland Oregon Seed. 2020-2021</b>	<b>\$4,000</b>
Islam, M.A. Sainfoin and falcata alfalfa evaluation in Wyoming.	
<b>Barenbrug USA. 2020-2021</b>	<b>\$3,000</b>
Islam, M.A. Grass genotype/line testing for growth and yield potential.	
<b>USDA-NIFA ASAFS Program. 2019-2021.</b>	<b>\$457,339</b>
Afshar, R.K., Islam, M.A., Qin, R., and Liang, X. Increasing yield, quality, and economy of alfalfa hay through grass species selection and planting configuration under full and limited irrigation conditions.	
<b>USDA NIFA Crop Protection and Pest Management (CPPM). 2019-2022</b>	<b>\$324,998</b>
Jabbour, R., Rand, T.A., Peairs, F., Islam, M.A., Ritten, J., and Lee, B. Integration of Early Harvest with Biological Control for Sustainable Alfalfa Production.	
<b>Specialty Crop Block Grant Program – Farm Bill (SCBGP-FB), USDA Wyoming Department of Agriculture. 2019-2021</b>	<b>\$50,000</b>
Islam, M.A. Evaluation of Yacon in Rotation with Fenugreek in Wyoming Environments.	
<b>Grassland Oregon Seed. 2019-2020</b>	<b>\$4,000</b>
Islam, M.A. Sainfoin and falcata alfalfa evaluation in Wyoming.	
<b>Energy GA Fellowships, UW. 2018-2020</b>	<b>\$56,816</b>
Islam, M.A. Reclamation of disturbed areas used by gas industries in Wyoming by using some promising grass and legume genotypes.	
<b>South Dakota State University. 2018-2019</b>	<b>\$12,489</b>

<b>Islam, M.A.</b> Forage sorghum hybrid multi-location trials.	
<b>Y Cross Ranch Tuition and Fee Award, COANR, UW. 2018-2019</b>	<b>\$9,000</b>
<b>Islam, M.A.</b> Developing a potassium fertility management program on alfalfa.	
<b>Edward H. and Susan King Lloyd Graduate Research Award, UW. 2018-2019</b>	<b>\$3,000</b>
<b>Islam, M.A</b> and Baidoo, M. Potassium and harvest management in alfalfa.	
<b>UW School of Energy Resources. 2018-2019</b>	<b>\$83,000</b>
Stahl, P.D., Eberle, C.A., Norton, J.B., <b>Islam, M.A.</b> , and Coupal, R.H. Use of Coal Residues as a Soil Amendment.	
<b>Specialty Crop Block Grant Program – Farm Bill (SCBGP-FB), USDA Wyoming Department of Agriculture. 2017-2019</b>	<b>\$24,500</b>
<b>Islam, M.A.</b> Evaluation of chickpeas in Wyoming Environments.	
<b>Y Cross Ranch Tuition and Fee Award, COANR, UW. 2017-2018</b>	<b>\$8,000</b>
<b>Islam, M.A.</b> Effect of potassium on alfalfa productivity.	
<b>South Dakota State University. 2017-2019</b>	<b>\$9,662</b>
<b>Islam, M.A.</b> Forage sorghum hybrid multi-location trials.	
<b>USDA-NIFA Alfalfa and Forage Research Program. 2016-2019</b>	<b>\$250,000</b>
<b>Islam, M.A.</b> , Burmmer, J., and Min, D. The silent decline in soil potassium levels and its effect on alfalfa productivity in the central and western US.	
<b>UW School of Energy Resources. 2016-2019</b>	<b>\$242,000</b>
Stahl, P.D., Coupal, R.H., <b>Islam, M.A.</b> , McLaughlin, J.F., and Norton, J.B. Use of coal residues as soil amendments.	
<b>UW AES Global Perspectives Grant. 2016</b>	<b>\$4,000</b>
<b>Islam, M.A.</b> Identification and evaluation of germplasm for development of improved forage cultivars.	
<b>UW CES Internal Grant. 2015-2016</b>	<b>\$2,197</b>
<b>Islam, M.A.</b> Request for funds for replacing outdated computer, and portable projector, portable projection screen, and portable mike system.	
<b>UW AES Grant (AD-416 and AD-417 WYO-457-10). 2015</b>	<b>\$2,604</b>
<b>Islam, M.A.</b> Multistate Project Number W-2012 “Enhancing management, production, and sustainability of grazing ruminants in extensive landscapes.”	
<b>Specialty Crop Block Grant Program – Farm Bill (SCBGP-FB), USDA Wyoming Department of Agriculture. 2015-2017</b>	<b>\$24,500</b>
<b>Islam, M.A.</b> Regional assessment of fenugreek for producer’s propagation.	
<b>Agriculture Producer Research Grant Program (APRGP), USDA Wyoming Department of Agriculture and UW AES. 2015-2017</b>	<b>\$40,000</b>
<b>Islam, M.A.</b> Evaluation of Birdsfoot Trefoil – A Non-bloating Forage Legume –in Wyoming.	
<b>Agriculture Producer Research Grant Program (APRGP), USDA Wyoming Department of Agriculture and UW AES. 2015-2017</b>	<b>\$40,000</b>
Dhekney, S., Jabbour, R., <b>Islam, M.A.</b> , and Horn, B. Engineering alfalfa weevil resistance in commercial alfalfa cultivars: a valuable tool for integrated pest management of alfalfa weevil.	
<b>Western SARE Graduate Student Grants. 2014-2016</b>	<b>\$24,998</b>
<b>Islam, M.A.</b> and Adjesiwor, A. Economic and Environmental Sustainability of Irrigated Grass-Legume Mixtures.	
<b>UW Summer Graduate Research/Graduate Student Enhancement. 2014</b>	<b>\$5,000</b>

<b>Islam, M.A.</b> Productivity, quality, water-use efficiency, and benefit-cost ratios of irrigated grass-legume mixtures.	
<b>Agriculture Producer Research Grant Program (APRGP), USDA Wyoming Department of Agriculture and UW AES. 2014-2017</b>	<b>\$40,000</b>
<b>Islam, M.A.,</b> Groose, R.W., Garcia y Garcia, A., and Nachtman, J.J. Wyoming production of locally-bred winter pea to integrate crop and livestock production in Wyoming.	
<b>Agriculture Producer Research Grant Program (APRGP), USDA Wyoming Department of Agriculture and UW AES. 2013-2016</b>	<b>\$40,000</b>
<b>Islam, M.A.</b> Effect of planting time and fertilizer management on quinoa production in Wyoming.	
<b>Specialty Crop Block Grant Program – Farm Bill (SCBGP-FB), USDA Wyoming Department of Agriculture. 2013-2016</b>	<b>\$20,000</b>
<b>Islam, M.A.</b> Evaluation of kinwa (quinoa) as a leafy green crop for adaptation to Wyoming.	
<b>Agriculture Producer Research Grant Program (APRGP), USDA Wyoming Department of Agriculture and UW AES. 2013-2016</b>	<b>\$40,000</b>
<b>Horn, B., Islam, M.A. (Research Advisor),</b> Jeliaskov, V., and Garcia y Garcia, A. Perennial cool-season grasses for hay production and fall grazing under full and limited irrigation.	
<b>Japan Society for Promotion of Science BRIDGE Fellowship Program. 2013-2014</b>	<b>\$11,250</b>
<b>Islam, M.A.</b> and Hirata, M. Creating a research and education network for developing sustainable milk, beef, and biofuel production from grasslands in diverse environments.	
<b>Academic and Student Programs, UW. 2013-2014</b>	<b>\$830</b>
<b>Islam, M.A.</b> Funding request for student demonstration and plant identification for forage crop science.	
<b>Energy GA Fellowships, UW. 2013-2015</b>	<b>\$43,194</b>
<b>Islam, M.A.</b> Potential of forage kochia to reclaim disturbed areas and areas of low reclamation potential used by gas industries in Wyoming.	
<b>ShREC Graduate Assistantship Program. 2013-2015</b>	<b>\$32,858</b>
<b>Islam, M.A.,</b> Jeliaskov V., Garcia y Garcia, A., Ritten, J., and Horn, B. Productivity, quality, water use efficiency, and benefit-cost ratios of irrigated grass-legume mixtures.	
<b>SAREC Graduate Assistantship Program. 2013-2015</b>	<b>\$32,858</b>
<b>Kniss, A., Mealor, B., Islam, M.A.,</b> Obour, A., Lee B., Paisley, S., and Claypool, D. Winter forage crops as a supplement to corn stalk grazing in integrated crop/livestock systems in Southeast Wyoming.	
<b>Forage Genetics International. 2012-2023</b>	<b>\$22,500</b>
<b>Islam, M.A.</b> Roundup Ready Alfalfa Testing.	
<b>Wyoming Crop Improvement Association. 2012-2017</b>	<b>\$5,000</b>
<b>Islam, M.A.</b> Forage Yield and Seed Yield Potential of Novel Tall Fescue under Irrigated Condition in the Big Horn Basin of Wyoming.	
<b>Allied Seed L.L.C. 2012-2016</b>	<b>\$1,050</b>
<b>Islam, M.A.</b> Alfalfa variety yield trials.	
<b>WY Department of Agriculture Specialty Crop Grant Program. 2012-2015</b>	<b>\$22,394</b>
<b>Obour, A., Islam, M.A.,</b> and Nachtman, J. Agronomic and economic evaluation of organic and conventional soil fertility management in High Tunnels.	
<b>International Crop Science Congress Travel Grant. 2012</b>	<b>\$2,000</b>
<b>Islam, M.A.</b> Request funds for attending the 6 <sup>th</sup> International Crop Science Congress in Brazil.	

<b>UW CES Internal Grant. 2012-2013</b>	<b>\$1,544</b>
Islam, M.A. Request for funds for replacing outdated computer.	
<b>The Noble Foundation. 2012-2013</b>	<b>\$6,100</b>
Islam, M.A. Research grant for tall fescue evaluation in the Great Plains of Wyoming.	
<b>The Noble Foundation. 2012-2013</b>	<b>\$5,000</b>
Islam, M.A. Research grant for tall fescue seed production evaluation in the Great Plains of Wyoming.	
<b>Academic and Student Programs, UW. 2012-2013</b>	<b>\$850</b>
Islam, M.A. Funding request for student demonstration and plant identification for forage crop science.	
<b>Edward H. and Susan King Lloyd Graduate Research Award, UW. 2012-2013</b>	<b>\$3,600</b>
Wehmeyer, B. and Islam, M.A (faculty advisor). Forage and biofuel potential of tall fescue germplasms.	
<b>Wyoming Reclamation and Restoration Center Graduate Assistantship Program, UW. 2011-2013.</b>	<b>\$64,000</b>
Islam, M.A., Waldron, B., and Stahl, P. Potential of forage kochia to reclaim steep topographic areas and areas of low reclamation potential used by gas industries.	
<b>Forage Genetics International, Dairyland Seed Co., Inc., and Land O'Lakes, Inc. 2011-2016</b>	<b>\$6,450</b>
Islam, M.A. Alfalfa variety yield trials.	
<b>UW AES Grant (AD-416 and AD-417 WYO-457-10). 2011</b>	<b>\$2,604</b>
Islam, M.A. Multistate Project Number NCCC031 "Ecophysiological aspects of forage management.	
<b>Western Region SARE Professional Development Proposal. 2011-2013</b>	<b>\$99,208</b>
Project Coordinators: Shewmaker, G.E., Fransen, S.C., Bohle, M., Cash, D.; Project Cooperators: Hannaway, D., Cheyney, C.C., Brazee, B., Islam, M.A., Brummer, J., Griggs, T.C., and Gray, C.W. Forage and Pasture Educational Program for Professionals in the Northwest.	
<b>Bohnenblust-Kolp Scholarship, Department of Plant Sciences, UW. 2011</b>	<b>\$2,650</b>
Islam, M.A. and Wehmeyer, B.A. Biofuel Production Potential of Tall Fescue Germplasm.	
<b>The Noble Foundation. 2010-2011</b>	<b>\$5,000</b>
Islam, M.A. Research grant for tall fescue seed production evaluation in the Great Plains of Wyoming.	
<b>UW AES Competitive Grants Program. 2011-2012</b>	<b>\$40,000</b>
Garcia y Garcia, A. and Islam, M.A. Towards the recommendation of scientifically-based irrigation scheduling strategies in Wyoming: A case study for forage alfalfa crop production.	
<b>USDA NIFA Climate Change (planning grant). 2010-2013</b>	<b>\$50,000</b>
Islam, M.A. (PD), Norton, U., Ritten, J., Groose, R., Santra, D., Norton, J., Garcia y Garcia, A., Sivanpillai, R., Gray, S., Del Grosso, S., Paisley, S., and Krall, J.J. Legume adoption practices in western central United States: Economic and environmental benefits in face of increased climatic variability.	
<b>USDA NIFA-Organic Agric. Research &amp; Extension Initiative. 2010-2015</b>	<b>\$1,019,972</b>
MacAdam, J., Brummer, J., Islam, M.A., Eun, J., Gray, C.W., Heleba, D., McMahon, D., Reeve, J., Shewmaker, G., and Young, A. Improved organic milk production through the use of the condensed tannin-containing forage legume birdsfoot trefoil.	
<b>UW CES Internal Grant. 2010</b>	<b>\$1,550</b>



<b>Islam, M.A.</b> Request for funds for replacing outdated computer and printer.	
<b>UW AES Grant (AD-416 and AD-417 WYO-457-10). 2010</b>	<b>\$2,604</b>
<b>Islam, M.A.</b> Multistate Project Number NCCC031 “Ecophysiological aspects of forage management.	
<b>UW AES Global Perspectives Grant. 2010</b>	<b>\$4,000</b>
<b>Islam, M.A.</b> Assessment of fenugreek for adaptation to South East Wyoming.	
<b>DuPont Crop Protection, Wilmington, DE. 2010-2013</b>	<b>\$90,000</b>
Mealor, B., Kniss, A., and <b>Islam, M.A.</b> Developing weed management strategies to improve desirable species establishment in reclamation of disturbed lands.	
<b>Apache Corporation, Clearmont, WY. 2010-2013</b>	<b>\$30,000</b>
Mealor, B., Kniss, A., and <b>Islam, M.A.</b> Developing weed management strategies to improve desirable species establishment in reclamation of disturbed lands.	
<b>School of Energy Resources, University of Wyoming. 2010-2013</b>	<b>\$85,000</b>
Mealor, B., Kniss, A., and <b>Islam, M.A.</b> Developing weed management strategies to improve desirable species establishment in reclamation of disturbed lands.	
<b>The Noble Foundation. 2010-2011</b>	<b>\$6,100</b>
<b>Islam, M.A.</b> Research grant for small grains and tall fescue evaluation in the Great Plains of Wyoming.	
<b>USDA Wyoming Department of Agriculture. 2010-2012</b>	<b>\$17,103</b>
<b>Islam, M.A.</b> and Krall, J.M. Assessment of fenugreek for adaptation to south east Wyoming.	
<b>Office of Research and Economic Develop. Major Equipment Grant. 2010-2011</b>	<b>\$21,210</b>
Kniss, A., Franc. G., <b>Islam, M.A.</b> , Norton, U., Mealor, M., Belden, K. Growth Chambers for Plant Science Research.	
<b>The Noble Foundation. 2009-2010</b>	<b>\$4,800</b>
<b>Islam, M.A.</b> Research grant for small grains and tall fescue evaluation in the Great Plains of Wyoming.	
<b>USDA Wyoming Department of Agriculture. 2009-2010</b>	<b>\$10,000</b>
<b>Islam, M.A.</b> , Krall, J.M., Cecil, J.T., and Natchman, J.J. Turfgrass evaluation for suitability in Wyoming climate.	
<b>Wyoming Crop Improvement Association. 2009-2011</b>	<b>\$15,000</b>
<b>Islam, M.A.</b> , Violet, R., and Stroh, R. Forage Yield and Seed Yield Potential of Novel Tall Fescue under Irrigated Condition in the Big Horn Basin of Wyoming.	
<b>Crop Science Society of America. 2007</b>	<b>\$2,000</b>
<b>Islam, M.A.</b> Competitive travel funds from the Crop Science Society of America and International Crop Science Congress to attend the International Crop Science Congress in Korea.	
<b>Japan Society for the Promotion of Science. 2002-2004</b>	<b>\$35,000</b>
<b>Islam, M.A.</b> and Hirata, M. Evaluation of centipedegrass as a forage species; a research project between Australia and Japan with an extended research grant (Japanese ¥3,000,000).	
<b>Acid Soil Action, NSW, Australia. 1998-2002</b>	<b>\$50,000</b>
<b>Islam, M.A.</b> and Dowling, P.M. Evaluation of <i>Austrodanthonia</i> accessions for acid tolerance and growth potential (AU \$70,000).	
<b>Rural Industries Research and Development Corporation. 2001</b>	<b>\$8,500</b>
<b>Islam, M.A.</b> Competitive funds from Rural Industries Research and Development Corporation, Canberra and the University of Sydney to attend the International Grassland Congress, Brazil, and to scientific visit to USA and UK (AU \$11,000).	

**Pending**

**Hatch/Hatch Multistate, Wyoming Agricultural Experiment Station Competitive Grants Program. 2022-2023** **\$105,251**  
**Islam, M.A.** NIRS DS3 Analyzer for forage quality and soil analyses.

**Unsuccessful (Selected last five years)**

**USDA NIFA Alfalfa and Forage Program. 2022-2025** **\$899,801**  
Liang, X., **Islam, M.A.**, Brummer, J., and Qin, R. Alfalfa-grass systems and irrigation strategies for improving productivity, stand persistence, profitability, and soil health in the West.

**Foundation for Food and Agriculture Research. 2021-2023** **\$450,000**  
Schlautman, B., Basche, A., **Islam, M.A.**, Krug, A.S., et al. Designing a sainfoin “next generation perennial pulse crop.” Building the basis for a directed domestication.

**USDA NIFA Foundational Knowledge of Ag Production Systems. 2020-2023** **\$279,802**  
Kniss, A., Jabbour, R. **Islam, M.A.**, Mealor, M., and Adjesiwor, A. Should We Harvest the Weeds? Toward a Mechanistic Understanding of Biodiversity Impacts on Forage Crop Productivity and Nutritive Value.

**USDA NIFA Foundational Knowledge of Ag Production Systems. 2019-2022** **\$279,802**  
Kniss, A., Jabbour, R. **Islam, M.A.**, and Adjesiwor, A. Should We Harvest the Weeds? Toward a Mechanistic Understanding of Biodiversity Impacts on Forage Crop Productivity and Nutritive Value.

**National Alfalfa & Forage Alliance. 2019-2021** **\$40,000**  
Min, D. and **Islam, M.A.** Effect of planting time and harvest interval on yield and nutritive value of low lignin alfalfa.

**USDA NIFA Sustainable Agricultural Systems; LOI. 2019-2024** **\$10,000,000**  
**Islam, M.A.**, Vigil, M., Del Grosso, S., Holman, J., Obour, A., Carr, P., Boss, D., Creech, C., Sexton, P.J., Graham, C., Stone, J., Kniss, A.R., Ritten, J.P., and Parker, S.D. Diversification of Semiarid Dryland Wheat-Based Cropping Systems with Annual Forages to Improve Crop Yields, Soil Health, and Profitability.

**NAFA the U.S. Alfalfa Farmer Research Initiative Grant 2018** **\$40,000**  
**Islam, M.A.** Sustainable Alfalfa Production through Efficient Management of Sulfur, Boron, and Harvest

**Northwest Wyoming Applied Research Grant Program, AES, UW. 2018-2020** **\$10,000**  
**Islam, M.A.**, Schell, S., Reynolds, C., Klein, R., Hopkin, F., Faxon, J., and White, G. Improving alfalfa seed production through surveying and testing artificial propagation methods of alkali bee populations in northwest Wyoming.

**Alfalfa Pollinator Research Initiative, USDA Agricultural Research Service - The National Alfalfa & Forage Alliance. 2018** **\$48,814**  
**Islam, M.A.**, Schell, S., Reynolds, C., Klein, R., Hopkin, F., Faxon, J., and White, G. Conduct survey and test artificial propagation methods on alkali bee populations in northwest Wyoming to increase alfalfa seed production.

**NAFA the U.S. Alfalfa Farmer Research Initiative Grant 2017** **\$50,000**

**Islam, M.A.** Effects of Sulfur and Boron Mining and Cutting Interval on Alfalfa Production and Quality

**Energy GA Fellowships, UW. 2017** **\$43,194**

**Islam, M.A.** Evaluation of some promising grass and legume genotypes for reclamation of disturbed areas used by gas industries in Wyoming.

**USDA AMS - Specialty Crop Multi-State Program. 2016** **\$793,889**

**Islam, M.A.,** Jeliaskov, V., Obour, A., Min, D. Fenugreek has Potential as Alternative Forage, Food, and Medicinal Crop.

***Grant Writing Workshops Attended:***

**Grant Writers' Seminars and Workshops, by Stephen W. Russell**

University of Wyoming, June 26, 2008

**CSREES Grants Writing Workshop**

Oklahoma State University, Still Water, OK, May 2008

**Presentations:**

***Invited Extension Presentations (total 105; 100 at UW):***

***In 2022 (total 6):***

6. **Islam, M.A.** and Shilpakar, C.\* 2022. Updates of Forage Research at Lingle. SAREC Field Day, August 10, 2022, Lingle, WY. Attendance: 45.
5. Shilpakar, C.\* and **Islam, M.A.** 2022. Forage legumes and their effects on soil health. SAREC Field Day, August 10, 2022, Lingle, WY. Attendance: 45.
4. **Islam, M.A.** and Munkaila, M.\* 2022. Roundup Ready Alfalfa. SAREC Field Day, August 10, 2022, Lingle, WY. Attendance: 45.
3. Munkaila, M.\* and **Islam, M.A.** 2022. Grass-legume mixtures. SAREC Field Day, August 10, 2022, Lingle, WY. Attendance: 45.
2. Yakubu, A.\* and **Islam, M.A.** 2022. Micronutrient effects on Alfalfa. SAREC Field Day, August 10, 2022, Lingle, WY. Attendance: 45.
1. Yakubu, A.\* and **Islam, M.A.** 2022. Annual vs. perennial systems. SAREC Field Day, August 10, 2022, Lingle, WY. Attendance: 45.

***In 2021 (total 3):***

3. **Islam, M.A.** 2021. The Potassium Needs of Alfalfa, Part 2. Alfalfa U Virtual Events, February 16, 2021, High Plains Journal. Attendance: 148.
2. **Islam, M.A.** 2021. Grazing Management—Systems and Methods. Agriculture and Horticulture Online Convention, January 4–15, 2021. Online Panel Discussion Session 2A, Production Agriculture, January 8, 2021, University of Wyoming Extension. Attendance: 12.
1. **Islam, M.A.** 2021. Grazing Management—Systems and Methods. Agriculture and Horticulture Online Convention, January 4–15, 2021. Online Panel Discussion Session 1A,

Production Agriculture, January 7, 2021, University of Wyoming Extension. Attendance: 19.

***In 2019 (total 3):***

3. **Islam, M.A.** 2019. An Update of Forage Research at Lingle. SAREC Field Day, August 21, 2019, Lingle, WY. Attendance: 55.
2. **Islam, M.A.** 2019. Assessing Roundup Ready Alfalfa. SAREC Field Day, August 21, 2019, Lingle, WY. Attendance: 50.
1. **Islam, M.A.** 2019. Alfalfa Research Updates in WY. The 7<sup>th</sup> Annual Wyoming Forage Field Day, May 30, 2019. Park County Fairgrounds, Powell, WY. Attendance: 90.

***In 2018 (total 6):***

6. **Islam, M.A.** 2018. Integrated Research and Extension Work on Forage Crops. University of Wyoming Extension Specialist Meeting Seminar, December 10, 2018. University of Wyoming, Laramie, WY. Attendance: 25.
5. **Islam, M.A.** 2018. Potassium and Harvest Management in Alfalfa. The 6<sup>th</sup> Annual Wyoming Forage Field Day, June 12, 2018. James C. Hageman Sustainable Agriculture Research and Extension Center, Lingle, WY. Attendance: 100.
4. **Islam, M.A.**, Ashilenje, D., Baidoo, M., and Shilpakar, C. 2018. Forage Research Updates in Lingle. The 6<sup>th</sup> Annual Wyoming Forage Field Day, June 12, 2018. James C. Hageman Sustainable Agriculture Research and Extension Center, Lingle, WY. Attendance: 50.
3. **Islam, M.A.** 2018. Organic Forage Production: Options and Considerations. The 5<sup>th</sup> Annual High Plains Organic Farming Conference, February 28, 2018. Laramie County Community College, Cheyenne, WY. Attendance: 35.
2. **Islam, MA.** 2018. Agronomy in Alfalfa. Alfalfa U – Loveland CO High Plains Journal, February 6, 2018. Loveland, CO. (*breakout presentation 2*) Attendance: 28.
1. **Islam, MA.** 2018. Agronomy in Alfalfa. Alfalfa U – Loveland CO High Plains Journal, February 6, 2018. Loveland, CO. (*breakout presentation 1*) Attendance: 40.

***In 2017 (total 2):***

2. **Islam, MA.** 2017. Alternative Forage Crop Options (forage sorghums, sainfoin, nitrate (prussic acid) poisoning of hybrid forage sorghum). High Plains Crop Convention, November 21, 2017. UWE Goshen County, Torrington, WY. Attendance: 21
1. **Islam, M.A.** 2017. Organic Forage Production: Can Alfalfa be Grazed Without Fear of Bloat? The 3<sup>rd</sup> Annual High Plains Organic Farming Conference, February 22, 2017. Laramie County Community College, Cheyenne, WY. Attendance: 45.

***In 2016 (total 5):***

5. **Islam, M.A.** 2016. Grass-legume Mixture for Forage Yield and Economic Benefits. Wyoming Forage Field Day, June 14, 2016. ShREC, WY. Attendance: 95.
4. **Islam, M.A.** 2016. Quinoa: A Potential Specialty Crop for Wyoming. Wyoming Master Gardener Association and Wyoming Farmers Market Association State Conference. April 1, 2016. Riverton, WY. Attendance: 23.
3. **Islam, M.A.** 2016. Fenugreek – A Specialty Crop: Some Pros and Cons. Wyoming Master Gardener Association and Wyoming Farmers Market Association State Conference. April 1, 2016. Riverton, WY. Attendance: 21.
2. **Islam, M.A.** 2016. Forage Variety Selection. Master Hay Grower, March 3, 2016. Cokeville, WY. Attendance: 27.
1. **Islam, M.A.** 2016. Agronomy in Alfalfa. Alfalfa U – Loveland CO High Plains Journal, February 25, 2016. Loveland, CO. Attendance: 54.

***In 2015 (total 8):***

8. Dhakal, D. and **Islam, M.A.** 2015. Grass-legume Mixture for Improved Forage Yield and Quality, Soil Properties, and Economic Return. SAREC Field Day, August 20, 2015. Lingle, WY. Attendance: 37.
7. Dhakal, D. and **Islam, M.A.** 2015. Grass-legume Mixture Trials under Pivot: An Update. ShREC Field Day, July 14, 2015. Sheridan, WY. Attendance: 35.
6. Dhakal, D. and **Islam, M.A.** 2015. Grass-legume Mixture for Improved Forage Yield, Forage Quality, Stand Persistence, and Economic Return. Wyoming Forage Field Day, June 11, 2015. Basin, WY. Attendance: 60.
5. **Islam, M.A.** 2015. Alternative Dryland Forage Crops. Northeast Wyoming Dryland Forage Workshop, March 27, 2015. Moorcroft, WY. Attendance: 35.
4. **Islam, M.A.** 2015. Dryland Alfalfa Varieties. Northeast Wyoming Dryland Forage Workshop, March 27, 2015. Moorcroft, WY. Attendance: 35.
3. **Islam, M.A.** 2015. Forage Variety Selection. Master Hay Grower, March 25, 2015. Fremont County Fair Grounds, Riverton, WY. Attendance: 20.
2. **Islam, M.A.** 2015. Grass Variety Selection. Master Hay Grower, March 24, 2015. Albany County Fairgrounds, Laramie, WY. Attendance: 29.
1. **Islam, M.A.** 2015. Variety Selection of Forage Crops. Hay Workshop, February 20, 2015. Pinedale, WY. Attendance: 45.

***In 2014 (total 11):***

11. **Islam, M.A.** 2014. Annual Forages: Species, Varieties, and Importance. Wyoming Beef Production Convention, November 18, 2014. Torrington, WY. Attendance: 40.
10. **Islam, M.A.** and Stump, W. 2014. Quinoa, A potential crop for Wyoming? Specialty Crop Workshop, November 1, 2014. Wheatland, WY. Attendance: 45.
9. **Islam, M.A.** 2014. Forage Crop Trials in Wyoming. LREC Field Day, August 28, 2014. Laramie, WY. Attendance: 45.
8. **Islam, M.A.** 2014. Quinoa Variety Trials in Wyoming. LREC Field Day, August 28, 2014. Laramie, WY. Attendance: 35.
7. **Islam, M.A.** 2014. Roundup Ready Alfalfa and Forage Trials: An Update. SAREC Field Day, August 21, 2014. Lingle, WY. Attendance: 37.
6. **Islam, M.A.** 2014. Economics of Tall Fescue Forage and Seed Production. PREC Field Day, July 17, 2014. Powell, WY. Attendance: 25.
5. **Islam, M.A.** 2014. Forage Establishment: Factors to Consider. Wyoming Forage Field Day, July 10, 2014. Eden Valley Community Center, Farson, WY. Attendance: 80.
4. **Islam, M.A.** 2014. Grass-Legume Mixtures and Grass Hay Production Studies. ShREC Field Day, June 14, 2014. Sheridan, WY. Attendance: 39.
3. **Islam, M.A.** 2014. Forage Variety Selection. Master Hay Grower, February 3, 2014. Agriculture Resource and Learning Center, Casper, WY. Attendance: 17.
2. **Islam, M.A.** 2014. Forage Crops Under Irrigation in Wyoming. Cattleman's Update, February 3, 2014. Albany County Fairgrounds, Laramie, WY. Attendance: 31.
1. **Islam, M.A.** 2014. Nutrient Management in Forage Crops. 2014 Wyoming Certification Rendezvous, January 22, 2014. Casper, WY. Attendance: 42.

***In 2013 (total 8):***

8. **Islam, M.A.** 2013. Roundup Ready Alfalfa Variety Trials. SAREC Field Day, August 22, 2013. Lingle, WY. Attendance: 25.

7. Dhakal, D. and **Islam, M.A.** 2013. Grass-legume Mixture: Production and Benefits. SAREC Field Day, August 22, 2013. Lingle, WY. Attendance: 25.
6. **Islam, M.A.** 2013. Species Selection for Irrigated Pastures. Pasture Management Professional Development Workshop, August 20-22, 2013. Fort Collins, CO. Attendance: 40.
5. **Islam, M.A.** 2013. Alfalfa Production and Management. Wyoming Forage Field Day, June 27, 2013. Lingle, WY. Attendance: 91.
4. Carter, C., Garcia-y-Garcia, A., Hansen, K., and **Islam, M.A.** 2013. Irrigation Practices in Alfalfa: Irrigation Methods, Water Use, and Economics. Wyoming Forage Field Day, June 27, 2013. Lingle, WY. Attendance: 91.
3. **Islam, M.A.** 2013. Establishment and Management of Alfalfa. Sheridan Research & Extension Center Field Day, June 15, 2013. Sheridan, WY. Attendance: 18.
2. **Islam, M.A.** 2013. Alfalfa: Establishment and Management. Sweetwater County Weed & Pest Workshop, March 20, 2013. Farson, WY. Attendance: 37.
1. **Islam, M.A.** 2013. New Forages Show Promise in Wyoming. Fremont County Farm & Ranch Days, January 30, 2013. Riverton, WY. Attendance: 25.

***In 2012 (total 12):***

12. **Islam, M.A.** 2012. Fenugreek research update. Field Day, Laramie Research and Extension Center, 30 August, 2012, Laramie, WY. Attendance: 45.
11. **Islam, M.A.** and Jolivet, M. 2012. Forage kochia research update. Field Day, Laramie Research and Extension Center, 30 August, 2012, Laramie, WY. Attendance: 45.
10. **Islam, M.A.** and Dhakal, D. 2012. Grass-legume mixture research update. Field Day, Laramie Research and Extension Center, 30 August, 2012, Laramie, WY. Attendance: 45.
9. **Islam, M.A.** and Wehmeyer, B. 2012. Tall fescue research update. Field Day, Laramie Research and Extension Center, 30 August, 2012, Laramie, WY. Attendance: 45.
8. **Islam, M.A.** 2012. Roundup ready alfalfa test and results. Field Day, James C. Hageman Sustainable Agriculture Research and Extension Center, 23 August, 2012, Lingle, WY. Attendance: 35.
7. **Islam, M.A.** 2012. Alfalfa response to sulfur and boron. Field Day, James C. Hageman Sustainable Agriculture Research and Extension Center, 23 August, 2012, Lingle, WY. Attendance: 35.
6. **Islam, M.A.** 2012. Alfalfa variety trials. Field Day, James C. Hageman Sustainable Agriculture Research and Extension Center, 23 August, 2012, Lingle, WY. Attendance: 35.
5. **Islam, M.A.** 2012. Benefits from grass-legume mixtures. Field Day, James C. Hageman Sustainable Agriculture Research and Extension Center, 23 August, 2012, Lingle, WY. Attendance: 35.
4. **Islam, M.A.** 2012. Genetics, variety development, and species selection. Pasture Management Professional Development Workshop, University of Idaho Nancy M. Cummings Research, Extension, and Education Center, August 21-23, 2012, North of Salmon, Idaho,. Attendance: 50.
3. Carter, C., Garcia, A, and **Islam, M.A.** 2012. Irrigation practices: Flood vs. sprinkler systems and cost analysis and economics. Wyoming Forage Field Day, Mile High Ranch, 28 June, 2012, Riverton, WY. Attendance: 55.
2. **Islam, M.A.** 2012. Forage variety selection. Wyoming Forage Field Day, Mile High Ranch, 28 June, 2012, Riverton, WY. Attendance: 55.
1. **Islam, M.A.** 2012. Forage establishment and management practices. Wyoming Forage Field Day, Mile High Ranch, 28 June, 2012, Riverton, WY. Attendance: 55.

***In 2011 (total 11):***

11. **Islam, M.A.**, and Wehmeyer, B. 2011. Tall fescue under irrigated conditions - update. Field Day, Sustainable Agricultural Research and Extension Center, 11 August, 2011, Laramie, WY. Attendance: 42.
10. **Islam, M.A.**, and Cecil, W. 2011. Fenugreek establishment and yield. Field Day, Laramie Research and Extension Center, 11 August, 2011, Laramie, WY. Attendance: 42.
9. **Islam, M.A.**, and Wehmeyer, B. 2011. Tall fescue under dryland conditions - update. Field Day, Sustainable Agricultural Research and Extension Center, 11 August, 2011, Laramie, WY. Attendance: 42.
8. **Islam, M.A.**, and Cecil, W. 2011. Fenugreek update. Field Day, Sustainable Agricultural Research and Extension Center, 21 July, 2011, Lingle, WY. Attendance: 35.
7. **Islam, M.A.** 2011. Forage legumes establishment. Field Day, Sustainable Agricultural Research and Extension Center, 21 July, 2011, Lingle, WY. Attendance: 35.
6. **Islam, M.A.** 2011. Grass-legume mixture: Benefits and economics. Field Day, Sustainable Agricultural Research and Extension Center, 21 July, 2011, Lingle, WY. Attendance: 35.
5. **Islam, M.A.** 2011. Turfgrass variety trials: Irrigated vs. dryland. Field Day, Sustainable Agricultural Research and Extension Center, 21 July, 2011, Lingle, WY. Attendance: 35.
4. **Islam, M.A.** 2011. Sainfoin: Establishment and production. Field Day, Powell Research and Extension Center, 14 July, 2011, Powell, WY. Attendance: 48.
3. **Islam, M.A.** 2011. Forage yield and seed yield potential of novel tall fescue. Field Day, Powell Research and Extension Center, 14 July, 2011, Powell, WY. Attendance: 48.
2. **Islam, M.A.** and Violet R. 2011. Forage yield and seed yield potential of novel tall fescue under irrigated condition in the Big Horn Basin of Wyoming. Wyoming Crop Improvement Association Annual Meetings, 3-4 February, 2011, Powell Research and Extension Center, Powell, WY. Attendance: 45.
1. **Islam, M.A.** 2011. Cool season grass evaluation: Some recent results. WESTI Ag Days, 1 February, 2011, Worland Community Center Complex, Worland, WY. Attendance: 11.

***In 2010 (total 11):***

11. **Islam, M.A.** 2010. Legume and grass trials: Some recent results. Wyoming Stock Growers Association Winter Roundup, Progressive Rancher Forum, 14 December, 2010, Parkway Plaza Hotel & Convention Centre, Casper, WY. Attendance: 39.
10. **Islam, M.A.** 2010. Fenugreek – A specialty crop establishment in South East Wyoming. Field Day, Laramie Research and Extension Center, 6 August 2010, Laramie, WY. Attendance: 35.
9. **Islam, M.A.** 2010. Mapping drought quantitative trait loci (QTL) in tall fescue. Field Day, Laramie Research and Extension Center, 6 August 2010, Laramie, WY. Attendance: 35.
8. Kimura, E. and **Islam, M.A.** 2010. Establishing forage legumes in Central West Regions/High Plains. Field Day, Laramie Research and Extension Center, 6 August 2010, Laramie, WY. Attendance: 35.
7. **Islam, M.A.**, Krall, J.M., and Nachtman, J.J. 2010. Fenugreek – A specialty crop establishment in South East Wyoming. Field Day, Sustainable Agricultural Research and Extension Center, 22 July 2010, Lingle, WY. Attendance: 50.
6. **Islam, M.A.** 2010. Cool-season grass evaluation at the Sustainable Agricultural Research and Extension Center. Field Day, Sustainable Agricultural Research and Extension Center, 22 July 2010, Lingle, WY. Attendance: 50.

5. **Islam, M.A.** 2010. Turfgrass performance under irrigated and dryland conditions. Field Day, Sustainable Agricultural Research and Extension Center, 22 July 2010, Lingle, WY. Attendance: 50.
4. Kimura, E. and **Islam, M.A.** 2010. Establishing forage legumes in Central West Regions/High Plains. Field Day, Sustainable Agricultural Research and Extension Center, 22 July 2010, Lingle, WY. Attendance: 50.
3. **Islam, M.A.** 2010. CRP farm renovation: Management and practices. Field Day, Del Tinsley Farm, 21 July 2010, Wheatland, WY. Attendance: 55.
2. **Islam, M.A.** 2010. Forage yield and seed yield potential of novel tall fescue under irrigated condition. Field Day, Powell Research and Extension Center, 8 July 2010, Powell, WY. Attendance: 45.
1. **Islam, M.A.** 2010. Forage crops: Establishment and management - some pros & cons. Forage Workshops in the Northeast Wyoming, 9-11 March 2010 Gillette, WY. Attendance: 35 (*Keynote speaker, 4 hours talk*).

***In 2009 (total 11):***

11. **Islam, M.A.** 2009. Mapping drought quantitative trait loci (QTL) in tall fescue. Field Day, Laramie Research and Extension Center, 28 August 2009, Laramie, WY. Attendance: 40.
10. Kimura, E. and **Islam, M.A.** 2009. Establishing forage legumes in Central West Regions/High Plains. Field Day, Laramie Research and Extension Center, 28 August 2009, Laramie, WY. Attendance: 40.
9. **Islam, M.A.** 2009. Best management practices for fertility and pest control in alfalfa for hay. Wyoming Ag-Business Convention, 4-5 August 2009, Sheridan, WY. Attendance: 55.
8. **Islam, M.A.** 2009. Best management practices for fertility and pest control in grass for hay. Wyoming Ag-Business Convention, 4-5 August 2009, Sheridan, WY. Attendance: 55.
7. **Islam, M.A.** 2009. Forage crop evaluation at the Sustainable Agricultural Research and Extension Center. Field Day, Sustainable Agricultural Research and Extension Center, 23 July 2009, Lingle, WY. Attendance: 55.
6. Kimura, E. and **Islam, M.A.** 2009. Establishing forage legumes in Central West Regions/High Plains. Field Day, Sustainable Agricultural Research and Extension Center, 23 July 2009, Lingle, WY. Attendance: 55.
5. **Islam, M.A.** 2009. Forage yield and seed yield potential of novel tall fescue under irrigated condition. Field Day, Powell Research and Extension Center, 9 July 2009, Powell, WY. Attendance: 50.
4. **Islam, M.A.** 2009. Creeping and meadow foxtail: Adaptation, use, and management. Medicine Bow Conservation District Annual Winter Workshop, 27 February 2009, Medicine Bow, WY. Attendance: 50.
3. **Islam, M.A.** and Groose, R.W. 2009. New developments in forage legumes, especially in alfalfa. Range and Pasture Management Workshop, Powell Research and Extension Center, 24 February 2009, Powell, WY. Attendance: 45.
2. **Islam, M.A.** and Norton, J.B. 2009. Interseeding legumes in hay and pasture. Fremont County Farm and Ranch Days, 5 February 2009, Riverton, WY. Attendance: 65.
1. **Islam, M.A.** and Groose, R.W. 2009. New developments in forage legumes. WESTI Ag Days, 3-4 February 2009, Worland, WY. Attendance: 60 (2 talks).

***In 2008 (total 5):***



5. **Islam, M.A.** 2008. Pasture renovation: Value of fertilization and reseeding. The Society for Range Management Wyoming Section and Soil and Water Conservation Society joint annual meeting, 18-20 November 2008, Cheyenne, WY. Attendance: 105.
4. **Islam, M.A.** 2008. Pasture renovation: Establishment, reseeding, and interseeding. The Society for Range Management Wyoming Section and Soil and Water Conservation Society joint annual meeting, 18-20 November 2008, Cheyenne, WY. Attendance: 100.
3. **Islam, M.A.** 2008. Grazing performance of annual versus perennial cool-season grass system. University of Wyoming Animal Science Seminar Series, 7 November 2008, UW, Laramie, WY. Attendance: 60.
2. **Islam, M.A.** 2008. Economics: is annual or perennial a better grass system? Field Demonstration for College Students' Field Trip with teachers (South Dakota State University) at the Noble Foundation, Ardmore, OK, May 13, 2008. Attendance: 10.
1. **Islam, M.A.**, Butler, T.J., Hopkins, A.A. and Bouton, J.H. 2008. Grazing performance: Conventional annual rye vs. perennial tall fescue systems. Field Demonstration for NCCC-31 Meeting at the Noble Foundation, Ardmore, OK, March 13, 2008. Attendance: 55.

***In 2007 (total 3):***

3. **Islam, M.A.** and Butler, T.J. 2007. Tifton 85 bermudagrass: a superior warm-season grass to Coastal bermudagrass. Field Day at the Ole Butler's Farm, Vashti, TX, July 12, 2007. Attendance: 70.
2. **Islam, M.A.** 2007. Comparison of economics between cool-season annual and perennial grazing system. College Students' Field Trip Tour Class (A Multi-University Approach to Grazinglands) presentation and discussion at the Noble Foundation, Ardmore, OK, June 14, 2007. Attendance: 35.
1. **Islam, M.A.** 2007. Is cool-season perennial grass system better than traditional cool-season annual grass system for grazing? Field day at the Noble Foundation, Ardmore, OK, January 19, 2007. Attendance: 50.

***Wyoming Forage Field Day (Organized and Hosted at different locations based on producers' questions and demands; average attendance over 100 each year; since 2012)***

***(Programs include workshop/presentation, producers' panel discussion, forage plots demonstration, forage equipment and products demonstration; programs can be viewed at [Wyoming Forage Field Day](#))***

8. Laramie Research and Extension Center, Laramie, WY, June 18, 2020 (postponed until 2022 due to COVID-19 pandemic).
7. Park County Fairgrounds, Powell, WY, May 30, 2019. Attendance: 90.
6. James C. Hageman Sustainable Agriculture Research and Extension Center, Lingle, WY, June 12, 2018. Attendance: 140.
5. Sheridan Research and Extension Center, Sheridan, WY, June 14, 2016. Attendance: 130.
4. Big Horn County Fairgrounds, Basin, WY, June 11, 2015. Attendance: 105.
3. Eden Valley Community Center, Farson, WY, July 10, 2014. Attendance: 110.
2. James C. Hageman Sustainable Agriculture Research and Extension Center, Lingle, WY, June 27, 2013. Attendance: 125.
1. Mile High Ranch, Riverton, WY, June 28, 2012. Attendance: 115.

***Extension Consultations: Issue-specific (more than 215 since June 2008):***

Del Tinsley, Manger, Owner, and Producer,  
Tinsley (CRP) Farm, Wheatland, WY  
Donn Randall, WY Bussiness Council, WY  
Mr. Hass, Hass Ranch, WY  
Ric Miller, General Manager, Kiowa Creek  
Ranch, Elbert, CO  
Thad York/Ken Fletcher, Managers, Silver  
Spur Ranch; Encampment  
Jim Gill, UW CES Educator, Worland

Gary Marshall, UW staff and Farmer,  
Laramie  
Sandra Frost, CES Educator, Powell

John Glover, Farmer/Producer, Stroh Farm,  
Powell  
Devon, Farmer, Blue Ribbon Sod, Cheyenne  
Randall Violet, Res. Associate, PREC,  
Powell  
Bonda Habets, NRCS Conservation  
Agronomist/Forage Specialist, Casper  
Myles Bush, Student/Producer, Ten Sleep,  
WY  
Jerry Nachtman, SAREC, Lingle, WY

Martin, NRCS Fairground, Laramie  
Ron Cunningham, CES Educator, Worland

Gillam Gill, Producer, Casper, WY

Deb Shanahan, Producer and UW Alumni,  
Wheatland, WY  
Cindy Fulton, NRCS, Powell, WY

Gene Gade, UW CES Educator, NE  
Wyoming  
Dr. Brenda K. Schladweiler, BKS  
Environmental Associates, Inc. Gillette, WY  
Scott Forrest, Organic Dairy Producer,  
Torrington, WY  
Larry Gerard, Producer, Buffalo, WY  
Anne Leonard, Laramie, WY  
Kevin Schilthuis, President, Blue 80  
Construction Company, Lovell, WY

Scott Keith, Manager, Livestock and Forage  
Program, Wyoming Business Council, WY;  
Chelsi Waldon, Jackson, WY  
Mr. Bush, Producer, Ten Sleep, WY  
Jeffrey Morris, Lead Scientist/Joel Mason,  
Technician, Western Res. Institute, Laramie  
Calvin Storm, UW CES Educator, Rawlins

Katherine Boreen/Phillip Boreen, Boreen Hay  
and Cattle Co., LLC., Basin  
Joe Gloyd, Farmer, Laramie

Rick Stroh, Farmer/Rancher/Producer, Stroh  
Farms, Powell  
Gerry Denko, Retired Professor and Producer,  
Powell  
Mike Killen, Farm Manager, PREC, Powell  
Catherine Wissner, Horticulturist and  
Producer, Cheyenne  
Bill Kelly, Consultant, Wyoming Water  
Development Commission, Big Piney, WY  
Bob Baumgartner, Farm Manager, SAREC,  
Lingle, WY  
Austin Polchik, Student and Producer,  
Coplay, Pennsylvania  
Dallas Mount, CES Educator, Wheatland  
Jerry Hall, Research Manager, Oregon  
Grassland, OR  
Tracy Terrell, Rancher, T-A Land and Cattle  
WY LLC, Medicine Bow, WY  
Phil Jonson, Producer, Casper, WY

Dan Schreiner, Producer, Silver Sage Llamas,  
Casper, WY  
Jamie Eberly; BKS Environmental  
Associates; Gillette, WY  
Dr. Dustin Bronson; Postdoctoral Fellow, Ag  
College, UW  
Tim Bartel, Organic Dairy Producer, Lingle,  
WY  
Forrest Keizer, Worland, WY  
Casey Epler, Hillsdale, WY  
Charles Scott, Cattle Company, Casper, WY

Whit Stewart, Northeast Area Livestock  
Extension Educator, Gillette, WY  
Nathan Lindsey, Apache Foundation,  
Clearmont, WY  
Amy K. McLean, Laramie, WY  
Lowes Miller, Luning, NV  
Mike Moore, Wyoming Seed Certification  
Service, Powell, WY  
Eric Peterson, Pinedale, WY  
Albert Wyand; FL

John Whitson, Laramie, WY  
Roy Powers, Sheridan, WY  
Elizabeth Marie, Laramie, WY  
Ashley Cameron, Powell, WY  
Kellie Chichester; Laramie, WY  
Stephen Favor, Livingston, MT  
John Whipp, Lander, WY  
Kim Reaman, Laramie, WY  
Russell Nemetz, Billings, MT  
Marie Bourguignon, Lexington, KY  
Dennis P. Craig, Tie Siding, WY  
Dave Morneau, Lander, WY  
J. Kem Nicolaysen, Cole Creek Sheep Co.,  
Casper, WY  
Blaine Horn, UW Extension Educator, WY

Ron Swanson, Powell, WY  
Dennis Ruppert, Producer, Cheyenne, WY

Donald Shoemaker, Evanston, Wyoming  
Dennis Lamm, SCU, CO  
Muriel Forney, Laramie, WY  
Mark Shirley, NRCS, Saratoga, WY

Dennis & Annie Zadra, Producers, Greybull,  
WY  
Lance Peters, Frenchman Valley Coop,  
Wheatland, WY  
John A. Whip, Producer, WY  
Pat Ryan, Hanna, WY

Mark Anderson, Wheatland, WY  
Peter Arambel, Pinedale, WY  
Chase Dodson, Big Horn Basin, WY  
Roger Smith, Powell, WY

Brian Sebade, Extension Educator, Gillette,  
WY  
Paul Harman, Laramie, WY

Uttam Saha, Athens, GA  
Kathy Parsons, Powell, WY  
Cindy Soulis, Park County, WY

Jennifer Ripley, Oregon State University, OR  
Chris Clark, Marketing Specialist, AgSource  
Laboratories, WI  
Susan Walker, Torrington, WY  
G. Shalvey, Jackson, WY  
Gary white, Allied Seed, WY  
Clark and Arden Lawlar; Evanston, WY  
Janet Talbott; Laramie, WY  
Charity Green, Torrington, WY  
Darrell Meister, McCook, NE  
Kim Kittel, Cheyenne, WY  
TJ Burnham, Western Farmer-Stockman, MT  
Monia Haselhorst, Laramie, WY  
Roy Gordon, Douglas, WY  
Sevie Kenyon, John Deere Furrow Magazine  
Ashley Garrelts, UW Extension Educator,  
WY

Andrea Denham, Sweetwater County Weed &  
Pest, WY  
Eric Johnson, Farmer, Spokane, WA  
Rex Lockman, Wildlife & Range Specialist,  
Laramie County Conservation District, WY  
David Curtis, Consultant, Eagle Point, OR  
Andy Burkhardt, Graduate Student, UW, WY  
Jeremiah Vardiman, Sheridan, WY  
Kathrin Olson-Rutz, Montana State  
University, Bozeman, MT  
Jerry Sherman, Ag Consultant, WY

Kem Nichol森, Producer, Casper, WY

Whitt Riggs, FA Ranch, WY  
Rex and Richard Johnson, Producers,  
Wheatland, WY  
Elbert Beck, TX  
Tod Hewart, Medicine Bow, WY  
Alexander Boyatt, WY  
George Nash, WY

Jack Cecil, Lingle, WY  
 Juli J, WY  
 Dr. Mike Smith, Laramie, WY  
 Dave W., Laramie, WY  
 Teton County Office, WY  
 Garry White, Allied Seed Co., WY  
 Barton Stern, WY  
 Kristina Davis, Riverton, WY  
 Owen Miller, Eureka, NV  
 Chip Adamson, WY  
 Bob Westley, Lander, WY  
 Jim, Pavilion, WY  
 Decky Spiller, Manager, Kiowa Creek, CO  
 Jennifer Brennan, Reporter, Buffalo, WY  
 Ryan Farley WY  
 Jack Nicholas, Lander, WY  
 Peter Arambel, Pinedale, WY  
 Carson Hessenthaler, WY  
 Jim, Caserper, WY  
 Carson, WY  
 Wendy Kelly, UWE, WY  
 Prof. Tony McCan, WY  
 Kendal Davis, WY  
 Steve Stonebreaker, La Grande, OR  
 Larry Hall, Torrington, WY  
 Glenn Ledall, Greeley, CO  
 Troy Covey, Kansas City, MO  
 Chance Marshall, WY  
 Bruce Brummer, Casper, WY  
 Sanyo Baker, Thermopolis, WY  
 Mr. Louise, Vedauwo, WY  
 Alan Hedrick, KS  
 Butkovich Anton, Ft Collins, CO  
 Callie Hanson, WY  
 Matt Withroeder. Wyoming Game and Fish  
 Department, Laramie, WY  
 Caitlin Price Youngquist, WY  
 Sean Belliveau, Johnson County, WY  
 Keith Kelly, WY  
 Pat Hamilton, WY  
 Dell Tinsley, Wheatland, WY  
 Darla Whipple, Laramie, WY  
 Jine Gede, Crook County, WY  
 Gary S., WY  
 Bloedern R., WY  
 Charles Schisak, WY  
 Asay Wayne, WY  
 Mike Pearl, Laramie, WY  
 Bob Geise, Lusk, WY  
 Tom Wiseman, Torrington, WY  
 Brett Befus, UW Foundation, WY  
 Dillon Smith, Big Horn Basin, WY  
 Peter James, Mariland  
 Elmer De Tayermier, WY  
 Monte Lerwick, Albin, WY  
 Scott Titensor, Thayane, WY  
 Dr. Peter Stahl, Laramie, WY  
 Anna Anderson, Big Horn Basin, WY  
 Jim Lewis, Cody, WY  
 Catherin Borin, Big Horn Basin, WY  
 Lynn Hill, Laramie, WY  
 Chama Marshall, Fremont County, WY  
 Hannah Johnson, WY  
 B.J. Bender, Lazy T. Ranch, WY  
 Shawn Windpall, MT  
 Ronnie Givens, Wind River Reservation, WY  
 Wayne Thatman, Torrington, WY  
 Caitlin Youngquest, Washakie Co., WY  
 Ley Malm, Albine, WY  
 Mr. Iman, CSU, CO  
 Mr. Wiley, CO  
 Tim Peters, WY  
 Joe Purdy, WY  
 Liliane Haub, Bison Ranch, Pinedale, WY  
 Kevin Schilthuis, Big Horn Basin, WY  
 Donna Hoffman, Natrona County, WY

**Oral Presentations at Professional Meetings (since 2006; total 98; 7 in 2021; 34 are international; \*graduate student):**

98. **Islam, M.A.** and Ashilenje, D.\* 2022. Grass-legume Mixtures and Nitrogen Fertilizers Can Affect Trace Gas Emission and Soil Microbial Biomass. The 8<sup>th</sup> International Greenhouse Gas & Animal Agriculture Conference, June 5-9, 2022, Orlando, Florida. Attendance: 50

97. Baidoo, M.\* and **Islam, M.A.** 2021. Phosphorus and Potassium Effect on Alfalfa in Relation to Calcium and Magnesium under Different Harvest Times. The ASA-CSSA-SSSA International Annual Meetings, November 7-10, 2021. Salt Lake City, UT. Attendance: 40.
96. Qin, R., Torabian, S., Wang, G., Keshavarz Afshar, R., Liang, X., **Islam, M.A.**, and Brummer, J. E. 2021. Forage biomass under different alfalfa-grass configurations and irrigation regimes. The ASA-CSSA-SSSA International Annual Meetings November 7-10, 2021. Salt Lake City, UT. Attendance: 40.
95. **Islam, M.A.** and Ashilenje, D.\* 2021. Grass-legume mixtures for diversified and profitable forage production. Joint International Grassland & International Rangeland Kenya 2021 Virtual Congress, October 25-29, 2021. Attendance: 35.
94. **Islam, M.A.** and Baidoo, M.\* 2021. Alfalfa Response to Phosphorus and Potassium in Association with Calcium, Magnesium, and Harvest Management. Northwest Forage Workers Conference and WERA 1014 Meeting, July 27, 2021. Prosser, WA. Attendance: 20.
93. **Islam, M.A.** and Baidoo, M.\* 2021. Wyoming NCCC-31 Report-Ecophysiological Aspects of Forage Management. Alfalfa Response to Phosphorus and Potassium in Association with Calcium, Magnesium, and Harvest Management. Virtual meetings, July 21, 2021. Attendance: 21.
92. Baidoo, M.\* and **Islam, M.A.** 2021. Alfalfa Response to Phosphorus and Potassium in Association with Calcium, Magnesium, and Harvest Management. The Western Society of Crop Science Annual Meetings (Virtual) June 22-23, 2021. Attendance: 30.
91. Shilpakar, C.\* and **Islam, M.A.** 2021. Qualitative vegetation analysis of reclaimed grassland in Shirley Basin, Wyoming. The Western Society of Crop Science Annual Meetings (Virtual) June 22-23, 2021. Attendance: 30.
90. Baidoo, M.\* and **Islam, M.A.** 2020. Potassium, Cultivar, and Harvest Management Effects on Alfalfa Productivity. The ASA-CSSA-SSSA International Annual Meetings (Virtual) November 9-13, 2020. Attendance: 32.
89. **Islam, M.A.** 2020. Effect of species, planting time, and growing conditions on establishment and performance of cool-season grasses and legumes. W3012 - Enhancing management, production, and sustainability of grazing ruminants in extensive landscapes Virtual Meeting, July 30, 2020. Attendance: 19.
88. **Islam, M.A.** 2020. Wyoming NCCC-31 Report-Ecophysiological Aspects of Forage Management. Effect of species, planting time, and growing conditions on establishment and performance of cool-season grasses and legumes. Virtual meetings, July 22-23, 2020. Attendance: 20.
87. Shilpakar, C.\* and **Islam, M.A.** 2020. Effect of species, planting time, and growing conditions on establishment and performance of cool-season grasses and legumes. The Western Society of Crop Science Annual Meetings (Virtual) July 7-8, 2020. Attendance: 29.
86. Baidoo, M.\* and **Islam, M.A.** 2020. Forage Yield Response of Alfalfa to Potassium, Cultivar, and Harvest Time. Proceedings of the Western Society of Crop Science Annual Meetings (Virtual) July 7-8, 2020. Attendance: 29.
85. Lee, B.P., Ritten, J.P., **Islam, M.A.**, Herreid, J.S.\* , and Jabbour, R. 2020. Harvest Timing for Alfalfa Weevil Control. The Western Agricultural Economics Association Annual Meeting June 28-30, 2020. Santa Fe, NM. Attendance: 21.

84. Herreid, J.S.\*, Lee, B.P., **Islam, M.A.**, Ritten, J.P., and Jabbour, R. 2020. Effects of harvest timing on alfalfa weevil. The Entomological Society of America Pacific Branch Annual Meeting April 19-22, 2020. Spokane, WA. Attendance: 23.
83. **Islam, M.A.** and Baidoo, M.\* 2019. Potassium and Harvest Time Affect Forage Production, Nutritive Value, and Potassium Uptake of Alfalfa. The ASA-CSSA-SSSA International Meetings November 10-13, 2019. San Antonio, TX. Attendance: 32.
82. **Islam, M.A.** 2019. WERA 1014 Regional Project Report: On-going/Completed Research. University of Idaho, Nancy M. Cummings Research, Extension, and Education Center, Salmon, ID, October 15-16, 2019. Attendance: 27.
81. **Islam, M.A.** 2019. Effect of Potassium and Harvest Time on Forage Production, Nutritive Value, and Potassium Uptake of Alfalfa: An Update. W2012 - Enhancing management, production, and sustainability of grazing ruminants in extensive landscapes Meetings, July 25-26, 2019. MSU Northern Agriculture Research Center, Havre, MT. Attendance: 25.
80. **Islam, M.A.** 2019. Wyoming NCCC-31 Report-Ecophysiological Aspects of Forage Management. University of Wisconsin, July 17-18 2019. Madison, WI. Attendance: 22.
79. **Islam, M.A.** 2018. Diversified Forage Cropping Systems: Impacts on Resiliency, Productivity, and Profitability. Department of Plant Sciences Seminar December 7, 2018. University of Wyoming, Laramie, WY. Attendance: 23.
78. Baidoo, M.\* and **Islam, M.A.** 2018. Response of Alfalfa Cultivars to Potassium Application and Harvest Time. The ASA-CSSA International Annual Meetings November 7, 2018. Baltimore, MD. Attendance: 37.
77. **Islam, M.A.** 2018. Response of Alfalfa to Soil Potassium, Cultivars, and Harvesting Intervals. The International Congress and Expo on Agriculture and Horticulture August 14, 2018. Amsterdam, Netherlands. Attendance: 55.
76. **Islam, M.A.** 2018. Wyoming NCCC-31 Report-Ecophysiological Aspects of Forage Management. University of Arkansas, June 21 2017. Fayetteville, AR. Attendance: 20.
75. Baidoo, M.\* and **Islam, M.A.** 2018. Effect of Potassium and Harvest Time on Forage Accumulation and Potassium Uptake of Alfalfa. The Western Society of Crop Science Annual Meetings June 20, 2018. Laramie, WY. Attendance: 35.
74. Ashilenje, D.S.\* and **Islam, M.A.** 2018. Plant community structure and nitrogen dynamics underlie sustained productivity of grass-legume forage mixtures in Wyoming. The Western Society of Crop Science Annual Meetings June 20, 2018. Laramie, WY. Attendance: 35.
73. Khatiwada1, B., Acharya, S.N., Larney, F., Lupwayi, N.Z., Smith, E., and **Islam, M.A.** 2018. Ability of sainfoin and cicer milkvetch populations to rejuvenate existing pastures in western Canada. The Western Society of Crop Science Annual Meetings June 20, 2018. Laramie, WY. Attendance: 35
72. **Islam, M.A.** 2018. The silent decline in soil potassium levels and its effect on alfalfa productivity in the Central and Western U.S. The North American Alfalfa Improvement Conference Annual Meetings June 6, 2018. Logan, UT. Attendance: 95.
71. **Islam, M.A.** 2017. WERA 1014 Regional Project Report: On-going/Completed Research. University of Nevada, December 1 2017. Reno, NV. Attendance: 20.
70. **Islam, M.A.** 2017. Plant Diversity and Physiology for Efficient and Sustainable Agricultural Production: USA, Japan, and Global Perspectives. The 2nd Japan-US Science Forum International Conference November 18, 2017. Harvard University, Boston, MA. (*Invited presentation*) Attendance: 75.

69. Ashilenje, D.S.\* and **Islam, M.A.** 2017. Profiling canopy light interception and growth forms to predict forage yield and nutritive value for meadow bromegrass-alfalfa mixtures. ASA-CSSA-SSSA International Meetings. October 23, Tampa, FL. (*Oral PhD Student Competition*) Attendance: 53.
68. **Islam, M.A.** 2017. Evaluation of birdsfoot trefoil: Planting method, harvesting frequency, and cultivar. W2012 - Enhancing management, production, and sustainability of grazing ruminants in extensive landscapes Meetings, August 7-10, 2017. Eastern Oregon Agricultural Research Center, Oregon State University, Burns, OR. Attendance: 22.
67. **Islam, M.A.** 2017. Forage Research at UW, USA: Germplasm Search, Evaluation, and Cultivar Development. Department Seminar, The University of Sydney, Sydney Institute of Agriculture, Australia. July 28, 2017 Australian Technology Park, Sydney, Australia. (*Invited presentation*) Attendance: 35.
66. **Islam, M.A.** 2017. Legume adoption practices in the central great plains of USA for sustainable agricultural production in the face of climate change. The 2<sup>nd</sup> International Conference on Plant Science and Physiology June 27, 2017 Bangkok, Thailand (Conference Series Limited, UK). (*Invited presentation*) Attendance: 45.
65. **Islam, M.A.** 2017. Understanding Plant Diversity and Physiology for Resilient Production Systems and Environmental Benefits. The 2<sup>nd</sup> International Conference on Plant Science and Physiology June 26, 2017 Bangkok, Thailand (Conference Series Limited, UK). (*Invited Keynote Speaker*) Attendance: 45.
64. **Islam, M.A.** 2017. Wyoming NCCC-31 Report-Ecophysiological Aspects of Forage Management. University of Lincoln, Nebraska, June 20-22 2017. Lincoln, NE. Attendance: 27.
63. **Islam, M.A.** 2016. Managing Plant Diversity for Resilient Forage Systems and Environmental Benefits. Symposium - Resiliency in Forages and Grazinglands ASA-CSSA-SSSA International Meetings. November, 8, Phoenix, AZ. (*Invited presentation*) Attendance: 52.
62. **Islam, M.A.** 2016. Grazing Alfalfa without a Fear of Bloat: A Seminar on Sabbatical Work in Canada. Department of Plant Sciences Seminar, October 28, 2016. UW, WY. Attendance: 33.
61. **Islam, M.A.** 2016. WERA 1014 Regional Project Report: On-going/Completed Research. Colorado State University, Jefferson County Extension Office, October 19-20 2016. Golden, CO. Attendance: 29.
60. **Islam, M.A.** 2016. Grass-Legume Mixtures: Yield, Quality, and Benefit. W2012 - Enhancing management, production, and sustainability of grazing ruminants in extensive landscapes Meetings, August 7-10, 2016. Panhandle Research and Extension Center, UNL, NE. Attendance: 25.
59. **Islam, M.A.** and Aryal, P.\* 2016. Planting Time and Grass Mixtures Affect Forage Kochia Establishment. International Rangeland Congress, July 17-22, 2016. Saskatoon, Saskatchewan, Canada. (*Invited presentation*) Attendance: 47.
58. **Islam, M.A.** 2016. Forage Crop Research at UW, USA: Germplasm Search, Evaluation, and Cultivar Development. Agriculture and Agri-Food Canada Lethbridge Research Center Seminar. April 21, 2016. Lethbridge, Canada. (*Invited presentation*) Attendance: 46.
57. **Islam, M.A.** 2016. Summer Experience in Japan: People, Culture, Education, and Research. Department of Plant Sciences Seminar, February 19, 2016. UW, WY. Attendance: 31.

56. **Islam, M.A.** and Adjesiwor, A.T.\* 2015. Grass, legumes, and grass-legume mixtures: Yield, nutritive value, and soil water use. Western Alfalfa and Forage Symposium December 3-4 2015. Reno, NV. (*Invited presentation*) Attendance: 97.
55. Dhakal, D.\* and **Islam, M.A.** 2015. Grass-Legume Mixtures for Improved Yield, Quality, Persistence, and Economic Return. ASA-CSSA-SSSA International Annual Meetings November 16 2015. Minneapolis, MN. Attendance: 50.
54. Nilahyane, A.\*, **Islam, M.A.**, Garcia y Garcia, A., and Mesbah, A.O. 2015. Effect of Irrigation and Nitrogen Rates on Yield and Quality of Corn for Silage. ASA-CSSA-SSSA International Annual Meetings November 16 2015. Minneapolis, MN. (\*Robert F Barnes Graduate Student Oral Contest for PhD students in the C-6 division.) Attendance: 50.
53. **Islam, M.A.** 2015. WERA 1014 Regional Project Report: On-going/Completed Research. Oregon State University, Corvallis, October 20-23 2015. Corvallis, OR. Attendance: 30.
52. **Islam, M.A.** 2015. Agronomic Performance of High Value Crops in High Tunnel in Wyoming, USA. An invited presentation at the International Conference of Agronomy and Horticulture, Shanghai August 26 2015. Shanghai, China. Attendance: 25.
51. **Islam, M.A.** 2015. Forage Crop Research in Wyoming, USA. An invited presentation at the Hokkaido Agricultural Research Center, Sapporo August 5 2015. Hokkaido, Japan. Attendance: 11.
50. **Islam, M.A.** 2015. Forage Crop Production and Soil Health: Some Biological Perspectives. An invited presentation at the Muroran Marine Station, Hokkaido University June 25 2015. Hokkaido, Japan. Attendance: 25.
49. **Islam, M.A.** 2015. Wyoming NCCC-31 Report-Ecophysiological Aspects of Forage Management. Texas Tech University, May 26-28 2015. Lubbock, TX. Attendance: 25.
48. **Islam, M.A.** 2014. Fenugreek and Its Multipurpose Use. An invited presentation at the UW Botany Department December 12 2014. Laramie, WY. Attendance: 30.
47. **Islam, M.A.** 2014. Forage Crop Production and Culture in Japan. The Japan Society for the Promotion of Science-US Alumni Association 5<sup>th</sup> Multidisciplinary Science Forum International Annual Meetings November 7 2014. University of Florida, Gainesville, FL. Attendance: 45.
46. **Islam, M.A.** 2014. WERA 1014 Regional Project Report: On-going/Completed Research. University Inn, Utah State University, October 27-28 2014. Logan, UT. Attendance: 35.
45. **Islam, M.A.** 2014. Fenugreek: A Specialty Crop with Many Uses. An invited presentation at the Colorado State University October 16 2014. Fort Collins, CO. Attendance: 20.
44. **Islam, M.A.** 2014. Grass-Legume Mixtures. Tear Down the Walls Annual Meeting at Western Nebraska Community College, August 13-14 2014. Sidney, NE. Attendance: 25.
43. **Islam, M.A.** 2014. Wyoming NCCC-31 Report-Ecophysiological Aspects of Forage Management. Kellogg Biological Station, June 17-19 2014. Hickory Corners, MI. Attendance: 32.
42. **Islam, M.A.** 2014. Wyoming Chapter Gamma Sigma Delta. GSD Conclave at University of Nebraska-Lincoln, June 2-4 2014. Lincoln, NE. Attendance: 42.
41. **Islam, M.A.** 2014. Grass and Forage Research at the University of Wyoming, USA. An invited presentation at the Miyazaki University March 19 2014. Miyazaki, Japan. Attendance: 12.
40. **Islam, M.A.** 2014. Fenugreek has potential for multipurpose use. An invited presentation at the Tokyo University March 10 2014. Tokyo, Japan. Attendance: 17.



39. **Islam, M.A.** 2014. Multipurpose use of forage crops: Germplasm search and evaluation for cultivar development. An invited presentation at the Hokkaido University March 7 2014. Hokkaido, Japan. Attendance: 19.
38. **Islam, M.A.** 2014. Multipurpose use of forage crops: Germplasm search and evaluation. An invited presentation at the 267th Asia Seminar at the Hiroshima University February 24 2014. Hiroshima, Japan. Attendance: 29.
37. **Islam, M.A.** 2013. Fenugreek has potential to use as a forage crop. Western Alfalfa and Forage Symposium December 11-13 2013. Reno, NV. Attendance: 93.
36. **Islam, M.A.** 2013. Multipurpose use of forage crops: Germplasm search, evaluation, and cultivar development. Plant Sciences Seminar November 8 2013. Department of Plant Sciences, University of Wyoming, Laramie, WY. Attendance: 29.
35. **Islam, M.A.,** Saha, M.C., and Wehmeyer, B.A. 2013. Drought stress affects agronomic performance of tall fescue genotypes. ASA-CSSA-SSSA International Annual Meetings November 3-6 2013. Tampa, FL. Attendance: 69.
34. Dhakal, D.\* and **Islam, M.A.** 2013. Grass-legume mixtures to mitigate nitrogen need and improve soil properties in the Great Plains of Wyoming. ASA-CSSA-SSSA International Annual Meetings November 3-6 2013. Tampa, FL. Attendance: 67.
33. **Islam, M.A.** 2013. Forage Crop Research in Wyoming for Ruminant Use. W1012 - Improving Ruminant Use of Forages in Sustainable Production Systems for the Western US Meetings, October 14-17, 2013. Las Cruces, NM. Attendance: 21.
32. **Islam, M.A.** 2013. Research Update: Forage Research at SAREC. Pacific North West Forage Workers and WERA 1014 Conference, October 7-8, 2013. Laramie, WY. Attendance: 39.
31. **Islam, M.A.,** and Saha, M.C. 2013. Agronomic traits in tall fescue populations under irrigated and rain-fed conditions. The 22<sup>nd</sup> International Grassland Congress, September 15-19, 2013. Sydney, Australia. Attendance: 127.
30. **Islam, M.A.** 2013. Tall Fescue Response to Dryland and Irrigated Conditions. Tear Down the Walls Annual Meeting, August 14-15, 2013. Colby, KS. Attendance: 29.
29. **Islam, M.A.** 2013. Forage Research in Wyoming. NCCC 31 - Ecophysiological Aspects of Forage Management Meetings, June 4-6, 2013. Lexington, KY. Attendance: 27.
28. **Islam, M.A.** and Wehmeyer, B.A. 2013. Biofuel and forage potential of cool-season grass genotypes. The Japan Society for the Promotion of Science-US Alumni Association 3<sup>rd</sup> Multidisciplinary Science Forum International Annual Meetings February 1 2013. Chapman University, Orange, CA. Attendance: 35.
27. **Islam, M.A.,** and Violett, R. 2012. Effect of Nitrogen and Clipping on Forage and Seed Yield of Tall Fescue. ASA-CSSA-SSSA International Annual Meetings October 21-24 2012. Cincinnati, OH. Attendance: 27.
26. **Islam, M.A.** 2012. Wyoming WERA-1014 Report: Pacific North West Forage Workers and WERA 1014 Conference, October 1-3, 2012, Kimberly, ID. Attendance: 30.
25. **Islam, M.A.** 2012. CAP Proposal: Reviewers' comments, discussion, and future plan. "Tear Down the Walls" Annual Meeting, August 15-16, 2012, James C. Hageman Sustainable Agriculture Research and Extension Center (SAREC), University of Wyoming, WY. Attendance: 37.
24. **Islam, M.A.** 2012. Fenugreek in semiarid environment. "Tear Down the Walls" Annual Meeting, August 15-16, 2012, James C. Hageman Sustainable Agriculture Research and Extension Center (SAREC), University of Wyoming, WY. Attendance: 35.

23. **Islam, M.A.** 2012. Wyoming NCCC-31 Report: Ecophysiological aspects of forage management. NCCC-31 National Annual Meetings, 19-21 June 2012, Ramada Mall of America, Bloomington, MN. Attendance: 25.
22. **Islam, M.A.** 2012. An Update of Forage Legumes Research in Wyoming. Animal Science Seminar Series, January 27, 2012, Department of Animal Sciences, UW, WY. Attendance: 35.
21. **Islam, M.A.** and Kimura, E. 2011. Scarification method and storage time affect hard seed and germination of forage legumes. Japan Society for the Promotion of Science-US Alumni Association Multidisciplinary Science Forum International Annual Meetings 28 October 2011. Western Michigan University Kalamazoo, MI. Attendance: 65.
20. **Islam, M.A.** 2011. Fenugreek: What is it? Can we grow it in Wyoming? UW Department of Plant Sciences Seminar Series, 21 October 2011, Department of Plant Sciences, University of Wyoming. Attendance: 31.
19. **Islam, M.A.**, Krall, J.M., Nachtman, J.J., and Baumgartner, R.E., Bandara, M., and Acharya, S.N. 2011. Evaluation of fenugreek for forage and seed yield potential in Wyoming. ASA-CSSA-SSSA International Annual Meetings October 16-19 2011. San Antonio, TX (American Society of Agronomy, Crop Science Society of America, Soil Science Society of America). Attendance: 35.
18. **Islam, M.A.** 2011. Sustaining legumes in grasslands to reduce nitrogen fertilization: A multi-regional assessment. "Tear Down the Walls" Annual Meeting -ASA High Plains Dryland Cropping Systems Community Meeting, August 11-12, 2011, USDA-ARS Platte Conference Room, Fort Collins, CO. Attendance: 21.
17. **Islam, M.A.** 2011. Wyoming WERA-1016 Report: Adaptation, quality and management of sustainable cellulosic biofuel crops in the West, WERA-1016 National Annual Meetings, June 20 – 22, 2011, WSU-IAREC Prosser, WA. Attendance: 28.
16. **Islam, M.A.** 2011. Wyoming NCCC-31 Report: Ecophysiological aspects of forage management. NCCC-31 National Annual Meetings, 30-31 March 2011, Purdue University Beck Center, IN. Attendance: 23.
15. **Islam, M.A.**, Krall, J.M., Nachtman, J.J., Baumgartner, R.E., and Bandara, M. 2011. Assessment of fenugreek: A new specialty crop. Japan Society for the Promotion of Science-US Alumni Association Multidisciplinary Science Forum International Annual Meetings 11-12 March 2011. Seattle, WA. Attendance: 60.
14. **Islam, M.A.**, Saha, M.C., Baumgartner, R.E., and Nachtman, J.J. 2010. Seed yield potential of tall fescue germplasm in the Great Plains of Wyoming. ASA-CSSA-SSSA International Annual Meetings, 31 October – 3 November 2010. Long Beach, CA. Attendance: 90.
13. Kimura, E., Krall, J.M., Hess, B.W., and **Islam, M.A.** 2010. Seed scarification and a companion crop may enhance forage legume establishment in the Central West regions of USA. ASA-CSSA-SSSA International Annual Meetings, 31 October - 3 November 2010. Long Beach, CA. Attendance: 90.
12. Kimura, E. and **Islam, M.A.** 2010. Enhancing forage legumes establishment through seed scarification and use of companion crop in the high plains of Wyoming. American Forage and Grassland Council Annual Meetings, 21-23 June 2010, Springfield, MO. Attendance: 100. (*Emerging Scientist Competition; won 3rd place*).
11. **Islam, M.A.** 2010. Wyoming NCCC-31 Report: Ecophysiological aspects of forage management. NCCC-31 National Annual Meetings, 31 March – 1 April 2010, Hilton Garden Inn, Blacksburg, VA. Attendance: 19.

10. **Islam, M.A.** 2009. Wyoming NCCC-31 Report: Ecophysiological aspects of forage management. NCCC-31 National Annual Meetings, 24 June 2009, Grand Rapids, MI. Attendance: 21.
9. **Islam, M.A.,** Butler, T.J., Hopkins, A.A., Biermacher, J.T., Cook, B.J. and Bouton, J.H. 2008. Grazing performance of annual versus perennial grass system. Geological Society of America, Soil Science Society of America, American Society of Agronomy, Crop Science Society of America, and the Gulf Coast Association of Geological Societies with the Gulf Coast Section of SEPM International Annual Meetings, 5-9 October 2008, Houston, TX. Attendance: 71.
8. Biermacher, J.T., **Islam, M.A.,** Butler, T.J., Hopkins, A.A., Cook, B.J., Reuter, R. and Bouton, J.H. 2008. Value of tall fescue infected with a novel endophyte in the winter forage stocker grazing enterprise. The Western Agricultural Economics Association's Annual Meeting, 25-27 July, 2008, Big Sky, MT. Attendance: 70.
7. **Islam M.A.** 2008. Stocker grazing performance of annual and perennial grass systems. Inter-divisional Seminar at the Noble Foundation, 19 May, 2008, Ardmore, OK. Attendance: 88.
6. **Islam, M.A.,** Butler, T.J., Hopkins, A.A., Biermacher, J.T., Cook, B.J. and Bouton, J.H. 2008. Comparison of cereal rye/annual ryegrass and tall fescue stocker grazing systems in the southern Great Plains of USA. Fifth International Crop Science Congress. 13-18 April 2008, Jeju, Korea. Attendance: 100.
5. **Islam M.A.** 2007. Grazing performance of annual versus perennial grass system. Inter-divisional Seminar at the Noble Foundation, 14 May, 2007, Ardmore, OK. Attendance: 78.
4. **Islam, M.A.,** Butler, T.J., Biermacher and Cook, B.J. 2007. Grazing economics of annual versus perennial grass system – Inter-divisional project. Field Day Meetings at the Noble Foundation, 12 April 2007, Ardmore, OK. Attendance: 75.
3. **Islam, M.A.,** Butler, T.J., Biermacher, J.T., Cook, B.J., Hopkins, A.A. and Bouton, J.H. 2006. Grazing economics of perennial versus annual grass system. Third National Conference on Grazing Lands, 10-13 December 2006. St. Louis, MO. Attendance: 60.
2. **Islam, M.A.,** Butler, T.J., Bushong, J.T. and Rowland, M.W. 2006. Effect of *Rhizobia* inoculants on wild bean. ASA-CSSA-SSSA International Annual Meetings 12-16 November 2006. Indianapolis, IN. Attendance: 75.
1. **Islam M.A.** 2006. Evaluation of wild bean. Inter-divisional Seminar at the Noble Foundation, 15 May, 2006, Ardmore, OK. Attendance: 70.

***Poster Presentations at Professional Meetings/Field Days (since 2000; total 77; 4 in 2022; \*Graduate Student):***

77. **Islam, M.A.** and Ashilenje, D.\* 2022. Comparison of Grass-legume Mixtures and Nitrogen Effects on Trace Gas Emission and Soil Microbial Biomass. The 8<sup>th</sup> International Greenhouse Gas & Animal Agriculture Conference, July 31-August 5, 2022, Glasgow, UK.
76. Shilpakar, C.\* and **Islam, M.A.** 2022. Effect of grass legume mixtures on below ground biomass and microbial population. SAREC Field Day, August 10, 2022. Lingle, WY.
75. Munkaila, M.\* and **Islam, M.A.** 2022. Alfalfa-grass mixtures and irrigation affect forage accumulation. SAREC Field Day, August 10, 2022. Lingle, WY.
74. Yakubu, A.\* and **Islam, M.A.** 2022. Response of alfalfa forage yield to micronutrients under semi-arid conditions. SAREC Field Day, August 10, 2022. Lingle, WY.

73. Baidoo, M.\* and **Islam, M.A.** 2021. Potassium and Harvest Management Effect on Productivity of Old Stands of Alfalfa. The ASA-CSSA-SSSA International Annual Meetings November 7-10, 2021. Salt Lake City, UT.
72. Liang, X., Keshavarz Afshar, R., Qin, R., **Islam, M.A.**, Brummer, J. E., Cabot, P., and Quirino Souza Dayoub Zagato, L. 2021. Forage yield and nutritive value of different alfalfa-grass intercropping systems under two irrigation regimes. The ASA-CSSA-SSSA International Annual Meetings November 7-10, 2021. Salt Lake City, UT.
71. Shilpakar, C.\* and **Islam, M.A.** 2021. Quantitative and Qualitative Vegetation Analysis of a Reclaimed Grassland. The ASA-CSSA-SSSA International Annual Meetings November 7-10, 2021. Salt Lake City, UT.
70. Munkaila, M.\*, and **Islam, M.A.** 2021. Productivity of alfalfa-grass mixtures. SAREC Field Day, August 25, 2021. Lingle, WY.
69. Baidoo, M.\* and **Islam, M.A.** 2021. Potassium and Cultivar Affect Forage Yield of Alfalfa. SAREC Field Day, August 25, 2021. Lingle, WY.
68. Shilpakar, C.\* and **Islam, M.A.** 2021. Contribution of Grass-legume Mixtures on Forage and Soil Quality. SAREC Field Day, August 25, 2021. Lingle, WY.
67. Shilpakar, C.\* and **Islam, M.A.** 2020. Competitive Ability of Cool-season Perennial Grasses against Downy Brome Grown in Different Soils. The Western Society of Crop Science Annual Meetings (Virtual) July 7-8, 2020.
66. Baidoo, M.\* and **Islam, M.A.** 2020. Potassium Rate, Cultivar, and Harvest Management Affect Potassium Uptake in Alfalfa. The Western Society of Crop Science Annual Meetings (Virtual) July 7-8, 2020.
65. **Islam, M.A.**, Baidoo, M.\*, and Shilpakar, C.\* 2019. Forage Yield and Nutritive Value of Sorghum Cultivars Under Irrigated and Dryland Conditions. SAREC Field Day, August 21, 2019. Lingle, WY.
64. Shilpakar, C.\* and **Islam, M.A.** 2019. Performance of some promising genotypes of cool season perennial grasses and legumes in disturbed environments. SAREC Field Day, August 21, 2019. Lingle, WY.
63. **Islam, M.A.**, Baidoo, M.\*, and Shilpakar, C.\* 2019. Tall fescue-Alfalfa Mixtures for Improved Forage Production. SAREC Field Day, August 21, 2019. Lingle, WY.
62. **Islam, M.A.**, Baidoo, M.\*, and Shilpakar, C.\* 2019. Assessing Roundup Ready Alfalfa Cultivars for Wyoming Conditions. SAREC Field Day, August 21, 2019. Lingle, WY.
61. Baidoo, M.\*, and **Islam, M.A.** 2019. Potassium and Cultivar Affect Forage Yield of Alfalfa. SAREC Field Day, August 21, 2019. Lingle, WY.
60. **Islam, M.A.**, Baidoo, M.\*, and Shilpakar, C.\* 2019. Evaluating Chickpea Cultivars with Nitrogen Fertilization for Forage and Grain Production. SAREC Field Day, August 21, 2019. Lingle, WY.
59. **Islam, M.A.**, Baidoo, M.\*, and Shilpakar, C.\* 2019. Forage Production of Cool Season Perennial Grasses Planted in Fall Under Irrigated and Dryland Conditions. SAREC Field Day, August 21, 2019. Lingle, WY.
58. **Islam, M.A.** and Baidoo, M.\* 2019. Soil Potassium Levels and Its Effect on Alfalfa Productivity. The SSSA International Soils Meeting January 8, 2019. San Diego, CA.
57. **Islam, M.A.**, Baidoo, M.\*, Brummer, J., and Min, D. 2018. Effects of potassium, cultivar, and harvest time on sustainable alfalfa production. Proceedings of the 2<sup>nd</sup> World Alfalfa Congress, November 13, 2018, Cordoba, Argentina.

56. Baidoo, M.\* and **Islam, M.A.** 2018. Effect of Potassium and Harvest Time on Potassium Uptake and Nutritive Value of Alfalfa. Proceedings of the ASA-CSSA International Annual Meetings November 6, 2018. Baltimore, MD.
55. Shilpakar, C.\* and **Islam, M.A.** 2018. Perennial cool season grass, legume, and shrub for reclamation of disturbed areas in Wyoming. SAREC Field Day Demonstration, July 22, 2018. Linge, WY.
54. Baidoo, M.\* and **Islam, M.A.** 2018. Potassium and harvest time affect production and nutritive value of alfalfa. SAREC Field Day, July 22, 2018. Linge, WY.
53. **Islam, M.A.**, Baidoo, M.\*, and Ashilenje, D.\* 2018. Evaluation of Forage Sorghum Under Irrigated and Dryland Conditions. SAREC Field Day, July 22, 2018. Linge, WY.
52. **Islam, M.A.**, Baidoo, M.\*, and Ashilenje, D.\* 2018. Evaluation of Chickpea for Grain and Forage Production in Wyoming. SAREC Field Day, July 22, 2018. Linge, WY.
51. **Islam, M.A.**, Ashilenje, D.\*, Baidoo, M.\*, and Shilpakar, C.\* 2018. Tall fescue-alfalfa mixtures for improved forage yield and nutritive value. SAREC Field Day, July 22, 2018. Linge, WY.
50. **Islam, M.A.**, Ashilenje, D.\*, Baidoo, M.\*, and Shilpakar, C.\* 2018. Evaluation of roundup ready alfalfa for adaptability to Wyoming conditions. SAREC Field Day, July 22, 2018. Linge, WY.
49. **Islam, M.A.**, Ashilenje, D.\*, Baidoo, M.\*, and Shilpakar, C.\* 2018. Performance of cool season grasses under irrigated and dryland conditions in Wyoming. SAREC Field Day, July 22, 2018. Linge, WY.
48. Stahl, P., Eberle, C., **Islam, M.A.**, Norton, J., Coupal, R., and Yates, R. 2018. Use of Pyrolyzed Coal and Biochar as a Soil Amendment. SAREC Field Day, July 22, 2018. Linge, WY.
47. Baidoo, M.\* and **Islam, M.A.** 2018. Potassium and Harvest Time Affect Production and Nutritive Value of Alfalfa. The Western Society of Crop Science Annual Meetings June 20, 2018. Laramie, WY.
46. Ashilenje, D.S.\* and **Islam, M.A.** 2018. Benefits of grass-legume mixture extend to nitrogen gains and alleviation of greenhouse gas emissions in Wyoming. The Western Society of Crop Science Annual Meetings June 20, 2018. Laramie, WY.
45. **Islam, M.A.** 2018. The silent decline in soil potassium levels and its effect on alfalfa productivity in the Central and Western U.S. The North American Alfalfa Improvement Conference Annual Meetings June 4-6, 2018. Logan, UT.
44. **Islam, M.A.** and Ashilenje, D.\* 2017. Roundup Ready alfalfa variety trial for adaptability to Wyoming conditions - Updates. Field Day, James C. Hageman Sustainable Agriculture Research and Extension Center, August 24, 2017. Linge, WY.
43. Ashilenje, D.S.\* and **Islam, M.A.** 2017. Meadow Bromegrass-Legume Mixtures Enhance Forage Yield and Nutritive Value. Field Day, Sheridan Research and Extension Center, July 20, 2017. Sheridan, WY.
42. Nilahyane, A.\* and **Islam, M.A.** 2017. Evaluation of Irrigation Water and Nitrogen Management for Silage Corn Production in Wyoming. Field Day, Powell Research and Extension Center, July 13, 2017. Powell, WY.
41. Nilahyane, A.\* and **Islam, M.A.** 2017. Effect of Water Stress on Yield and Water Use of Corn for Silage Grown in Semiarid Environment of Wyoming. Field Day, Powell Research and Extension Center, July 13, 2017. Powell, WY.

40. Nilahyane, A.\* and **Islam, M.A.** 2017. Response of Silage Corn to Irrigation Water and Nitrogen under Different Irrigation Systems. Field Day, Powell Research and Extension Center, July 13, 2017. Powell, WY.
39. **Islam, M.A.** 2017. Silent Decline in Soil Potassium May Influence Sustainable Production of Alfalfa. Frontiers of Potassium – An International Conference January 25-27, 2017. Rome, Italy.
38. **Islam, M.A.** 2016. Plant Diversity for Resilient Production and Environmental Benefits in the Changing World. International Conference on Changing the World through Japan's Scientific Endeavors "Japan's Rapidly Aging Society" November 12, 2016. Harvard University, Boston, MA.
37. Baskota, S.\* and **Islam, M.A.** 2016. Evaluation of quinoa in Wyoming. Field Day, Laramie Research and Extension Center, August 27, 2016. Lingle, WY.
36. Baskota, S.\* and **Islam, M.A.** 2016. Evaluation of fenugreek in Wyoming. Field Day, Laramie Research and Extension Center, August 27, 2016. Lingle, WY.
35. Baskota, S.\* and **Islam, M.A.** 2016. Evaluation of quinoa in Wyoming. Field Day, James C. Hageman Sustainable Agriculture Research and Extension Center, August 25, 2016. Lingle, WY.
34. Baskota, S.\* and **Islam, M.A.** 2016. Evaluation of fenugreek in Wyoming. Field Day, James C. Hageman Sustainable Agriculture Research and Extension Center, August 25, 2016. Lingle, WY.
33. **Islam, M.A.** and Ashilenje, D.\* 2016. Roundup Ready alfalfa variety trial for adaptability to Wyoming conditions. Field Day, James C. Hageman Sustainable Agriculture Research and Extension Center, August 25, 2016. Lingle, WY.
32. Sarkar, S.\* and **Islam, M.A.** 2016. Birdsfoot Trefoil Response to Planting Method and Harvesting Frequency. Field Day, James C. Hageman Sustainable Agriculture Research and Extension Center, August 25, 2016. Lingle, WY.
31. Nilahyane, A.\* and **Islam, M.A.** 2016. Quality Response of Irrigated Silage Corn Grown under On-Surface and Sub-Surface Drip Irrigation Systems. Field Day, Powell Research and Extension Center, July 19, 2016. Powell, WY.
30. Nilahyane, A.\* and **Islam, M.A.** 2016. Effect of Irrigation on Physiological Traits of Corn for Silage Grown under On-surface Drip Irrigation System. Field Day, Powell Research and Extension Center, July 19, 2016. Powell, WY.
29. Nilahyane, A.\*, **Islam, M.A.**, Abdel O. Mesbah, A.O., Garcia y Garcia, A. 2016. Response of Corn for Silage to Water in a Semi-Arid Environment. ASABE Annual International Meeting, July 17-20, 2016. Orlando, FL.
28. **Islam, M.A.** 2015. Tall Fescue: Forage and Seed Production Economics. International Grassland Congress November 20-24, 2015. New Delhi, India.
27. Nilahyane, A., **Islam, M.A.**, Garcia y Garcia, A., Sylvester, A., and Herbert, S. 2015. Growth and Physiological Responses of Maize to Water Stress. ASA-CSSA-SSSA International Annual Meetings November 18, 2015. Minneapolis, MN.
26. Nilahyane, A., Garcia y Garcia, A., and **Islam, M.A.** 2015. Effect of Irrigation and Nitrogen Rates on Yield of Corn for Silage. Field Day, Powell Research and Extension Center, July 16, 2015. Powell, WY.
25. **Islam, M.A.** 2014. Economics of Tall Fescue Forage and Seed Production. The Japan Society for the Promotion of Science-US Alumni Association 5<sup>th</sup> Multidisciplinary Science

- Forum International Annual Meetings November 7, 2014. University of Florida, Gainesville, FL.
24. Nilahyane, A., Garcia y Garcia, A., and **Islam, M.A.** 2014. Effect of Irrigation and Nitrogen Rates on Yield of Corn for Silage. ASA-CSSA-SSSA International Annual Meetings November 5, 2014. Long Beach, CA.
  23. **Islam, M.A.** 2014. Forage and seed production economics of tall fescue. ASA-CSSA-SSSA International Annual Meetings November 3, 2014. Long Beach, CA.
  22. **Islam, M.A.**, Violet, R. 2014. Forage and seed yield potential of tall fescue under irrigated conditions. Field Day, Powell Research and Extension Center, July 17, 2014. Powell, WY.
  21. **Islam, M.A.**, Violet, R., Killen, M., Christman, J. 2013. Tall fescue: Forage and seed yield potential under irrigated conditions. Field Day, Powell Research and Extension Center, July 19, 2013. Powell, WY.
  20. **Islam, M.A.**, Krall, J.M., Nachtman, J.J., Baumgartner, R.E., Bandara, M., and Acharya, S.N. 2013. Fenugreek may have potential for multipurpose use. Western Society of Crop Science Annual Meetings, June 11-12, 2013. Pendleton, OR.
  19. Carter, C., Garcia y Garcia, A., **Islam, M.A.**, and Hansen, K. 2013. Effect of deficit irrigation on water use and water use efficiency of alfalfa. American Society of Agricultural and Biological Engineers (ASABE) Annual Meetings, July 21-24, 2013. Kansas city, MO.
  18. **Islam, M.A.**, Krall, J.M., Cecil, W.K., Nachtman, J.J., Baumgartner, R.E., Bandara, M., and Acharya, S. 2012. Fenugreek: A potential legume for multipurpose use. Field Day, Laramie Research and Extension Center, August 30, 2012, Laramie, WY.
  17. **Islam, M.A.**, Krall, J.M., Cecil, W.K., Nachtman, J.J., Baumgartner, R.E., Bandara, M., and Acharya, S. 2012. Fenugreek: A potential legume for multipurpose use. Field Day, James C. Hageman Sustainable Agriculture Research and Extension Center, August 23, 2012, Lingle, WY.
  16. **Islam, M.A.**, Krall, J.M., Cecil, W.K., Nachtman, J.J., Baumgartner, R.E., Bandara, M., and Acharya, S. 2012. Fenugreek: A potential legume for multipurpose use. The 6<sup>th</sup> International Crop Science Congress, August 6-10, 2012. Bento Goncalves, RS, Brazil (International Crop Science Congress).
  15. **Islam, M.A.**, Violet, R., Killen, M., Christman, J., Cecil, W., and Frost, S. 2012. Forage yield and seed yield potential of novel tall fescue under irrigated conditions. Field Day, Powell Research and Extension Center, July 17, 2012, Powell, WY.
  14. **Islam, M.A.**, Goose, R., Norton, U., Garcia y Garcia, A., Santra, D., Sivanpillai, R., Ritten, J., Norton, J., Paisley, S., and Krall, J. 2012. Legume Adoption Practices in the Central Great Plains of the United States: Economic and Environmental Benefits in Face of Climate Change. The 4<sup>th</sup> International Conference on Climate Change, July 12-13, 2012. University of Washington, Seattle, WA (Common Ground Publishing, USA).
  13. Kimura, E., Krall, J.M., Hess, B.W., and **Islam, M.A.** 2012. Establishing Forage Legumes with Companion Crop. The W-SCS Annual Meetings July 11-13 2012. Washington State University, Pullman, WA (Western Society of Crop Science).
  12. Kimura, E.\*, Krall, J.M., Hess, B.W., and **Islam, M.A.**, 2011. Effect of scarification method and storage time on hard seed and germination of forage legumes. Proceedings of the Western Society of Soil Science and Western Society of Crop Science Joint Annual Meetings 20-22 June 2011. University of Wyoming, Laramie, WY (Western Societies of Soil Science and Crop Science). \*Received *award of first place* in students' poster competition.

11. **Islam, M.A.**, Krall, J.M., Nachtman, J.J., and Baumgartner, R.E. 2011. Assessment of fenugreek for adaptation to South East Wyoming. Proceedings of the American Forage and Grassland Council Annual Conference 12-15 June 2011. French Lick, IN.
10. **Islam, M.A.**, Saha, M.C., and Baumgartner, R.E. 2010. Yield performance of cool-season grasses under irrigated and dryland conditions in the Great Plains of Wyoming. The American Forage and Grassland Council Annual Meetings 21-23 June 2010. Springfield, MO.
9. **Islam, M.A.**, Saha, M.C., Baumgartner, R.E., Cecil, J.T. and Nachtman, J.J. 2009. Forage and grain yield potential of small grains in the Great Plains of Wyoming. The ASA-CSSA-SSSA International Annual Meetings 1-5 November 2009. Pittsburgh, PA.
8. **Islam, M.A.** Butler, T.J. and Huo, C. 2008. Effect of different herbicides on switchgrass establishment and growth. The American Forage and Grassland Council and the Society for Range Management Joint Annual Meeting, 26-31 January 2008, Louisville, KY.
7. **Islam, M.A.** and Butler, T.J. 2008. Germplasm evaluation of rhizoma peanut for growth and forage potential. The American Forage and Grassland Council and the Society for Range Management Joint Annual Meeting, 26-31 January 2008, Louisville, KY.
6. **Islam, M.A.** and Butler, T.J. 2007. Effect of *Rhizobia* inoculants on annual medics. The ASA-CSSA-SSSA International Annual Meetings, 4-8 November 2007, New Orleans, LA.
5. **Islam, M.A.** and Butler, T.J. 2007. Evaluation of wild bean for forage potential. The AFGC Annual Meeting, 24-26 June 2007, Pennsylvania State College, PA.
4. Bushong, J.T., Butler, T.J., **Islam, M.A.** and Rowland, M.W. 2006. Annual medics (*Medicago* spp.) response to *Rhizobia* inoculation. The ASA-CSSA-SSSA International Annual Meetings, 12-16 November 2006, Indianapolis, IN.
3. **Islam, M.A.** and Hirata, M. 2005. Leaf dynamics and tillering in centipedegrass compared with bahiagrass. The XX International Grassland Congress, 26 June - 1 July 2005, University College Dublin, Ireland.
2. **Islam, M.A.**, Dowling, P.M., Jacobs, B.C., Milham, P.J., Garden, D.L. and Conyers, M.K. 2001. Emergence and survival responses of *Austroanthonia* spp. and ecotypes to soil pH. The XIX International Grassland Congress, 11-21 February 2001, São Paulo, Brazil.
1. **Islam, M.A.**, Milham, P.J., Conyers, M.K., Dowling, P.M., Jacobs, B.C. and Garden, D.L. 2000. A method of acidifying soil for pot trials. The 4th International Conference on Soil Dynamics, 26 - 30 March 2000, University of South Australia, Adelaide, Australia.

### **Integrated Research and Extension Projects - Current (ongoing) and Completed:**

- Field evaluation of tall fescue populations for mapping *quantitative trait loci* (QTL) for drought-tolerance, winter-hardiness, and forage yield potential (collaborative project between UW and the Noble Foundation; ongoing)
- Cool-season grass yield response to irrigation, drought, and planting time (collaborative project between UW and the Noble Foundation and USDA-ARS Logan, Utah; ongoing)
- Cool-season grass seed yield response to irrigation, drought, planting time, and cutting frequency (collaborative project between UW and the Noble Foundation and USDA-ARS Logan, Utah; completed)



- Forage yield and seed yield potential of novel tall fescue under irrigated condition in the Big Horn Basin of Wyoming (Project funded by Wyoming Crop Improvement Association; completed)
- Forage and grain yield potential of small grains in the great plains of Wyoming (collaborative project between UW and the Noble Foundation; completed)
- Herbicides tolerance trials of tall fescue (with Dr. Kniss; completed)
- Pasture Renovation Projects at Silver Spur Ranch, Encampment (completed):
  - i) Alfalfa establishment followed by interim crops under irrigated condition
  - ii) Alfalfa establishment followed by interim crops under limited water supply condition
  - iii) Hay meadow improvement through fertilization and legumes incorporation
- Effects of seeding rates and planting times on establishment of falcata alfalfa in dryland pastures (with Gary Marshall; completed)
- Enhancing establishment of legumes (alfalfa, sainfoin, cicer milkvetch, and medic) through seed scarification and cover crop (completed)
- Sustaining legumes in grasslands to reduce nitrogen fertilization: a multi-regional assessment (ongoing)
- Sainfoin response to phosphorus in Northwest Wyoming (completed)
- Turfgrass trials for drought tolerance (project funded by USDA Wyoming Department of Agriculture; completed)
- Alternative use of forages: Assessment of fenugreek as a forage crop (project funded by USDA Wyoming Department of Agriculture; completed)
- Improved organic milk production through the use of the condensed tannin-containing forage legume birdsfoot trefoil (with Dr. MacAdam, Utah State University; a regional multi-state project funded by NIFA Organic Agric. Research & Extension Initiative; completed)
- Towards the recommendation of scientifically-based irrigation scheduling strategies in Wyoming: A case study for forage alfalfa crop production (with Dr. Garcia y Garcia, AES Competitive Grants Program; completed)
- Multi-purpose use of forage kochia (with Dr. Waldron, USDA-ARS Forage and Range Research Lab, Utah and Dr. Stahl, WRRRC; WRRRC competitive grant, graduate student study; completed)
- Grass-legume mixtures to minimize nitrogen need and improve soil properties (graduate student study; completed)
- Biofuel production potential of tall fescue germplasm (graduate student study; completed)
- Alfalfa variety yield trials (project funded by Forge Genetics International, Dairyland Seed, and Land O'Lakes, Inc.; ongoing)
- Alfalfa response to sulfur and boron (started fall 2011; ongoing)
- Alfalfa variety yield trials (project funded by Allied Seed LLC; started fall 2012; ongoing)
- Roundup Ready alfalfa test (project funded by Forge Genetics International; started spring of 2012 and 2013; ongoing)

- Productivity, quality, and economics of irrigated grass-legume mixtures (with Drs. Jeliaskov, Garcia-y-Garcia, Ritten, and Horn; started fall 2013 at Adams Ranch, Sheridan; one MS and one PhD completed)
- Forage and reclamation potential of forage kochia (funded project, started fall 2013, completed)
- Cool-season grasses for hay production and fall grazing (funded project with Drs. Horn, Jeliaskov, and Garcia-y-Garcia; started in spring 2014; completed)
- Production potential of quinoa in Wyoming (funded project, started in spring 2014; completed)
- Planting time and fertility regime effects on quinoa (funded project, started in spring 2014; completed)
- Selection of superior tall fescue genotypes (started in 2016; ongoing)
- Fenugreek regional trials (funded project, started in spring 2015; completed)
- Birdsfoot trefoil evaluation (funded project, started in spring 2015; completed)
- Conventional and reduced lignin alfalfa response to potassium and harvesting intervals (NIFA funded multi-state project, started fall 2016; ongoing)
- Chickpea evaluation as a potential forage and feed crop (funded project, started in spring 2017; completed)
- Forage sorghum evaluation in the Northern Plains under irrigation and dryland – a multi-state project (funded project, started in spring 2017; completed)
- Forage and reclamation potential of some advanced grass and legume genotypes (funded project, started in summer 2018, completed)
- Evaluation of yacon in rotation with fenugreek in Wyoming environments (funded project, started in spring 2019, ongoing)
- Effect of foliar application of stabilized silicic acid on alfalfa (International collaboration with ReXil Agro BV, Netherlands; started in summer 2019, ongoing)
- Increasing yield, quality, and economy of alfalfa hay through grass species selection and planting configuration under full and limited irrigated conditions (NIFA funded multi-state project, started fall 2019; ongoing)
- Regenerative grazing study (DOE funded project, started spring 2021, ongoing)
- Evaluation of papa criolla potato in rotation with forage pea (funded project, started in spring 2021, ongoing)
- Fostering resilience and ecosystem services in landscapes by integrating diverse perennial circular systems (NIFA SAS funded multi-state project, started in fall 2021, ongoing)

### **Professional Service and Leadership:**

#### ***International:***

**Editorial Board Member, *Grassland Science*** (since 2012)

**Guest Editor, *Sustainability***, Special Issue (an International Journal), *Agroecology: Principles and Application for Efficient and Sustainable Agricultural Production* (2017-2019)

**Organizing Committee Member**, International Conference and Expo on Agriculture and Horticulture, August 13-14, 2018, Amsterdam, Netherlands (Scientific Federations, UK)

**Opening speech (Guest Speaker):** Plant Science and Physiology - The Latest Development and Future Trends. The 2<sup>nd</sup> International Conference on Plant Science and Physiology, June 26, 2017, Bangkok, Thailand.

**Chair:** Served as a **Chair** of *Technical Session I* (Plant Physiology, Plant Disease and Plant Pathogens, Plant and Agricultural Biotechnology, and Traditional Medicine): in the 2<sup>nd</sup> International Conference on Plant Science and Physiology, June 26, 2017, Bangkok, Thailand. (8 speakers from 6 countries).

**Co-Chair:** Served as a **Co-Chair** and **Judge** of a *Poster Presentation*. The 2<sup>nd</sup> International Conference on Plant Science and Physiology, June 27, 2017, Bangkok, Thailand. (8 presenters from 4 countries)

**Chair:** Served as a **Chair** of *Technical Session 4: Agriculture II* in the International Conference on Agronomy and Horticulture, August 26, 2015, Shanghai, China. (14 speakers from 14 countries).

**Chair:** Served as a **Chair** in the 5<sup>th</sup> International Crop Science Congress held in Jeju, Korea, April 13-18, 2008, with a total **1700** participants from over **65** countries.

Session title: Non-destructive diagnosis of crop status and grassland management

Date: April 17, 2008

Speakers: **total 5** from Australia, Canada, Iran, Japan, and Korea.

### ***National and Regional:***

**President:** Western Society of Crop Science, since 2021

**Host:** NCCC31 (Ecophysiological Aspects of Forage Management) Annual Meeting, University of Wyoming, Laramie, WY, June 15-17, 2022.

**Co-Host:** Western Society of Crop Science Annual Meeting, Colorado State University, Fort Collins, CO, June 21-22, 2022 (<https://www.crops.org/membership/branches/wscs>)

**Moderator:** Served as a **moderator** of *Professional Oral Presentations Section I*: Western Society of Crop Science Annual Meeting, June 21, 2022

**Moderator:** Served as a **moderator** of *Student Awards*: Western Society of Crop Science Annual Meeting, June 22, 2022

**Moderator:** Served as a **moderator** of *Concurrent Session VI* (Alternative Forages): Western Alfalfa and Forage Symposium, November 17, 2021, Reno, NV, (4 speakers from different states; over 100 attendees)

**Co-Host:** Western Society of Crop Science Annual Meeting (Virtual), June 22-23, 2021 (<https://www.crops.org/membership/branches/wscs>)

**Moderator:** Served as a **moderator** of *Professional Oral Presentations Session IV*: Western Society of Crop Science Annual Meeting (Virtual), June 23, 2021

**NIFA Foundational Knowledge of Agricultural Production Systems Adhoc Panel Reviewer,** August 26-28, 2020 (two proposals)

**Co-Host:** NCCC31 (Ecophysiological Aspects of Forage Management) Annual Meeting (Virtual), July 22-23, 2020.

**Co-Host:** Western Society of Crop Science Annual Meeting (Virtual), July 7-8, 2020 (<https://www.crops.org/membership/branches/wscs>)

**President-Elect:** Western Society of Crop Science, 2019-2021

**Host:** Western Society of Crop Science Annual Meeting, June 19-20, 2018, Laramie, WY (<https://www.crops.org/membership/branches/wscs>)

One of the **Co-Organizers** of 11 Western States (AZ, CA, CO, ID, MT, NV, NM, OR, UT, WA, and WY), Western Alfalfa & Forage Symposium (since 2013)

**NIFA Foundational Knowledge of Agricultural Production Systems Panel Reviewer**, Washington DC, September 12-14, 2017 (primary panelist for 3 proposals, 2<sup>nd</sup> panelist for 3 proposals, and 3<sup>rd</sup> panelist for 3 proposals; total 9 proposals)

**Moderator**: Served as a *moderator* of *Main Session* (Alfalfa Production and Pest Management I): Western Alfalfa and Forage Symposium, November 29, 2017, Reno, NV, (4 speakers from different states; *over 300 attendees*)

**Chair**: Served as a Chair of *Breakout #2 Session* (Alternative Forage Crops): Western Alfalfa and Forage Symposium, December 3-4, 2015, Reno, NV, (*8 speakers* from different states)

**Judge** C6- Robert F. Barnes graduate students competition at ASA-CSSA-SSSA meeting, Phoenix, AZ, November 7, 2016

**Judge**, ACS-Student Speech Contest (ACS449.3) at 2016 ASA-CSSA-SSSA meeting, Phoenix, AZ, November 6, 2016

**Chair** (2014-2015), NCCC31 (Ecophysiological Aspects of Forage Management)

**Secretary** (2013-2014), NCCC31 (Ecophysiological Aspects of Forage Management)

**NIFA Climate Change Panel Reviewer**, Washington DC, July 22-25, 2013 (primary panelist for 5 proposals, 2<sup>nd</sup> panelist for 5 proposals, and 3<sup>rd</sup> panelist for 5 proposals; total 15 proposals)

**Chair**, WERA-1014 (Intensive Pasture Management for Sustainable Livestock Production in the Western US), 2013-2014

**Judge**, The Robert F Barnes Graduate Student competition for Outstanding Graduate Oral Presentations, ASA-CSSA-SSSA Meetings, Division C6, Long Beach, CA, 2014

**Convener and organizer**, PNW Forage Workers and WERA-1014 Conference, UW, Laramie, WY, 2013

**Convener and organizer**, Tear Down the Walls Meeting, SAREC, Lingle, WY, 2012;

**Judge**, C-03 Graduate Student Poster Competition, ASA-CSSA-SSSA Meetings, Cincinnati, OH, 2012

**Judge**, National Student Research Symposium Poster Contest, Students of Agronomy, Soils and Environmental Sciences (SASES) ASA-CSSA-SSSA Meetings, San Antonio, TX, 2011

**Judge**, The Robert F Barnes Graduate Student competition for Outstanding Graduate Oral Presentations, ASA-CSSA-SSSA Meetings, Division C6, Long Beach, CA, 2010

**Judge**, National Student Research Symposium Poster Contest, Students of Agronomy, Soils and Environmental Sciences (SASES) ASA-CSSA-SSSA Meetings, Long Beach, CA, 2010

**Judge for National Hay Show**, Wyoming State Fair (*since August 2009*)

*Member and Wyoming representative*, WERA 1012; WERA 1014; WERA 1016 (*since 2009*)

**Grant Programs Reviewer** Western Region Sustainable Agricultural Research and Education program, *Western SARE* (*since 2009, reviewed 44 proposals*)

*Member and representative of Wyoming* NCCC31 Ecophysiological Aspects of Forage Management (*since 2008*)

*Member, Journals reviewers, participant in future meeting/plan* (Division C-06); American Society of Agronomy, Soil Science Society of America, and Crop Science Society of America, (*since 2005*)

*Member and Journal reviewer*, American Forage and Grassland Council (*since 2005*)

**University:**

*University Reappointment, Tenure and Promotion (RT&P) Committee*, University of Wyoming (since 2022)

*Search Committee Chair* (2022), Assistant/Associate Professor, Forage Production/Weed Management, Plant Sciences Department, UW

*Search Committee Member* (2022), Assistant Professor, Precision Livestock Management, Animal Science Department, UW

*Budget and Space Coordinator*, Department of Plant Sciences, UW (since 2019)

*Search Committee Member* (2021), Assistant Professor, Weed Science, Plant Sciences Department, UW

*Search Committee Member* (2020), the Rochelle Chair, Animal Science Department, UW

*Faculty Senate Alternate*, UW (since March 2013)

*Faculty Senate*, UW (Fall-Spring, 2016-2017)

*College Tenure and Promotion (T&P) Committee*, UW College of Agriculture and Natural Resources (2014-2017)

*Search Committee Chair* (2014-2016), Assistant Professor, Agronomist/Irrigation Specialist, Plant Sciences Department, UW

*Search Committee Member* (2012-2013), Assistant Professor, Small Grains Breeder/Agronomist, Plant Sciences Department, UW

*President* (2016-2017), *Secretary* (2014-2015), *Secretary-Elect and Treasurer* (2013-2014) (Local Chapter), Gamma Sigma Delta, The Honor Society of Agriculture

*Faculty Advisor* of Recognized Student Organization (RSO), Agroecology Student Club at UW (since 2019)

*Faculty Advisor* of Recognized Student Organization (RSO), Bangladesh Students' Association at UW (since 2014)

*Search Committee Member* (2012-2013), Assistant Professor, Soil Chemist, Ecosystem Science and Management Department, UW

*Member Scholarship Committee: SEND (Student Engagement and Networking Drive) program*, College of Agriculture and Natural Resources (since 2012)

*Member Forage Resources Management Team* (since 2011)

*Member Ag College Scholarship (Brand of Excellence) Committee* (since 2011)

*Member, Agroecology Undergraduate Curriculum Review Committee* (2010-2014)

*Search Committee Member* (2011), Master Gardener coordinator, Dept. of Plant Sciences, UW

*Search Committee Member* (2010-2011), Assistant Professor, Ruminant Nutrition, Animal Science Department, UW

*Search Committee Chair* (2010), *Research Scientist Agronomist*, UW Sustainable Agriculture Research & Extension Center, Lingle

*Search Committee Member* (2008-09), Faculty Irrigation Specialist, UW Powell Research & Extension Center

**Judge** UW Popular Magazine, *Reflections* (since November 2009)

**UW Forage Website** (<http://www.uwyo.edu/plantsciences/UWplant/Forages/>) Development (since November 2009)

**Editorial Board Member/Reviewer:**

*Editorial Board Member and Reviewer of the following journals:*

Associate Editor (Agronomy Journal, since 2018)  
Grassland Science (Editorial Board Member, since 2012)  
Guest Editor (Sustainability, 2017-2019)  
American Society of Agronomy (Agronomy Journal, Reviewer)  
Crop Science Society of America (Crop Science, Reviewer)  
Soil Science Society of America (SSSA Journal, Reviewer)  
Rangeland Ecology & Management (Reviewer)  
Journal of Agronomy (Technical Editor)  
American Journal of Plant Physiology (Technical Editor)  
International Journal of Agricultural Research (Technical Editor)  
International Journal of Soil Science (Technical Editor)  
Journal of Plant Sciences (Technical Editor)  
Asian Journal of Plant Sciences (Technical Editor)  
Asian Journal of Crop Science (Technical Editor)  
Pakistan Journal of Biological Sciences (Technical Editor)  
The Scientific World Journal (Guest Editor)

***More than 100 journal papers have been reviewed since 2005; in 2018-22, 32 as Guest Editor (Sustainability) and 27 as Handling Editor and Reviewer (Grassland Science)***

**Additionally, served as a reviewer of the following:**

*External Tenure and Promotion Packet review (6; University of Maryland East Shore, MD, 2022; Oregon State University, OR, 2021; University of Nevada, Reno, 2020; University of Idaho, 2018; University of Agriculture Faisalabad, Pakistan, 2017; United Arab Emirates University, 2014; 2 declined due to time conflict from Washington State University, 2021 and Texas A&M, 2018)*

*AES Global Perspective Grant Review (8 since 2017)*

*AES Competitive Grant Review (5 since 2016)*

*UW Extension Bulletin Review (3 since 2014)*

*Western SARE Grant Programs Review (44 since 2009)*

*Reflections (Magazine) Article Review (11 since 2009)*

*UW Field Days Bulletin Review (13 since 2013)*

*Internal Departmental Review (9 since 2006)*

*CRIS Project Review (1 since 2012)*

***Academic:***

**Teaching**

**Forage Crop Science - PLNT 4700 / PLNT 5700**

***-Designed the course and developed the course materials***

*Taught every fall*

*Fall 2022: total 10 students*

*5 students; starting from junior to senior levels*

*5 students; Graduate (MS and PhD) levels*  
 Fall 2021: total **4 students**  
*4 students; starting from junior to senior levels*  
 Fall 2020: total **13 students**  
*9 students; starting from sophomore to senior levels*  
*4 students; Graduate (MS and PhD) levels*  
 Fall 2019: total **19 students**  
*16 students; starting from sophomore to senior levels*  
*3 students; Graduate (MS and PhD) levels*  
 Fall 2018: total **14 students**  
*10 students; starting from sophomore to senior levels*  
*4 students; Graduate (MS) levels*  
 Fall 2017: total **16 students**  
*14 students; starting from sophomore to senior levels*  
*2 students; Graduate (MS) levels*  
 Fall 2016: total **17 students; starting from sophomore to senior levels**  
 Fall 2015: total **22 students**  
*17 students; starting from sophomore to senior levels*  
*5 students; Graduate (MS and PhD) levels*

### **Internship in Agroecology - AECL 4930**

Fall 2022: total **4 students**  
*4 students; starting from junior to senior levels*  
 Spring 2022: total **5 students**  
*5 students; starting from sophomore to senior levels*  
 Fall 2021: total **12 students**  
*12 students; starting from sophomore to senior levels*  
 Spring 2021: total **1 student**  
*1 student; Freshman level*  
 Fall 2020: total **9 students**  
*9 students; starting from sophomore to senior levels*

### **Guest Lectures**

#### ***Capstone Agroecology Seminar (AECL 4990), Department of Plant Sciences, University of Wyoming***

February 8, 2022: One undergraduate lecture – **12 students**  
 1 hour lecture on “*Current Issues in Forage Science*” followed by ½ hour Q&A  
 February 16, 2021: One undergraduate lecture – **13 students**  
 1 hour lecture on “*Current Issues in Forage Science*” followed by ½ hour Q&A  
 February 18, 2020: One undergraduate lecture – **22 students**  
 1 hour lecture on “*Current Issues in Forage Science*” followed by ½ hour Q&A

#### ***College of Agriculture, Hokkaido University, Japan***

July 7, 2015: One undergraduate lecture – **42 students**  
 1½ hours lecture on “*Forage Production and Utilization in USA*”

July 3, 2015: One graduate lecture – **22 students**  
 1½ hours lecture on “Sustainable Forage Production”

**Forage Crop Science - PLNT 3200 [CROP 2200, 3200]**  
*-Designed the course and developed the course materials*

Taught every fall

Fall 2014: *total 21 students; starting from sophomore to graduate levels*

Fall 2013: *total 11 students; starting from sophomore to graduate levels*

Fall 2012: *total 15 students; starting from sophomore to graduate levels*

Fall 2011: *total 18 students; starting from sophomore to graduate levels*

Fall 2010: *total 11 students; starting from sophomore to graduate levels*

Fall 2009: *total 15 students; starting from sophomore to graduate levels*

Fall 2008: *total 18 students; starting from sophomore to graduate levels*

**Thesis Research (PLNT 5960) (Number of students at Master levels)**

<u>Year</u>	<u>Spring</u>	<u>Summer</u>	<u>Fall</u>
2022	1	1	1
2021	-	1	1
2020	1	1	1
2019	2	1	-
2018	-	2	-
2017	2	1	-
2016	-	2	2
2014	1	3	2
2013	1	2	2
2012	2	2	1
2011	1	2	2
2010	5	-	1
2009	-	-	3

**Dissertation Research (PLNT 5980) (Number of students at PhD levels)**

<u>Year</u>	<u>Spring</u>	<u>Summer</u>	<u>Fall</u>
2022	1	2	1
2021	1	2	2
2020	-	-	1
2018	1	1	-
2017	-	1	1
2016	1	1	1
2015	1	1	1
2014	1	1	2
2013	1	1	1
2012	1	1	1
2011	-	-	1
2010	6	-	-
2009	-	-	5



**Research in Crops (PLNT 5600) (Number of students at Graduate levels)**

<u>Year</u>	<u>Spring</u>	<u>Summer</u>	<u>Fall</u>
2022	-	1	-
2021	1	-	-
2018	-	1	-
2016	-	-	2
2014	-	-	1

**Research Apprenticeship (AECL 4920) (Number of students at Undergraduate levels)**

<u>Year</u>	<u>Spring</u>	<u>Summer</u>	<u>Fall</u>
2018	-	-	1
2016	-	1	1
2015	-	-	1
2013	1	2	-
2010	-	-	1

**Advising/Mentoring****Undergraduate students: 21 (2008-2017)**

Aaron Hockman	Clayton M. Kawcak	Cody M. Smith
Deiter P. Goldenstein	Erin S. Kinsey	Jessie R. Carlson
Karsten A. Jordan	Laura E. Slaght	Luke S. Nieslanik
Matthew A. Lipp	Preston J. Talbert	Steven D. Miller
William M. Kalimeras	Hannah J. Hopp	John M. Elsom
Caleb Monk	Eugene L. Schmidt	Mckenna M. Schumacher
Wesley J. Taylor	Benjamin Trupp	Michele Ury Foist

**Graduate students (M.S./Ph.D.):****M.S. Students: 12***Current***3 students**

- Desmond Asiedu (will start spring 2023)
- Blaine Magnuson (started in spring 2022)
- Mohammed Munkaila (started in fall 2020)

*Graduated***9 students**

- Chandan Shilpakar (started in summer 2018, graduated in fall 2020; currently doing Ph.D. at University of Wyoming)
- Michael Baidoo (started in fall 2017, graduated in spring 2019)
- Saugat Baskota (started in fall 2015, graduated in summer 2017; currently doing Ph.D. at University of Idaho)
- Sayantan Sarkar (started in fall 2015, graduated in spring 2017; currently a postdoc at University of Tennessee)

Bryce A. Wehmeyer (started in summer 2011, graduated in spring 2016; currently working in CO as Greenhouse Manager)  
Matthew T. Jolivet, Plant Sciences; currently working at NRCS  
Albert T. Adjesiwor (started in fall 2013, graduated in spring 2015; currently an Assistant Professor at the University of Idaho)  
Parmeshwor Aryal (started in fall 2013, graduated in summer 2015; currently a postdoc at the University of Florida)  
Emi Kimura (started in spring 2009, graduated in spring 2011; currently an Assistant Professor at Texas A&M)

**Ph.D. Students: 6**

*Current*

**2 Students**

Adam Yakubu (started in summer 2022)  
Chandan Shilpakar (started in spring 2021)

*Graduated*

**4 students**

Michael Baidoo (started in fall 2019, graduated in spring 2022; currently Research Director, United Agronomy, North Dakota)  
Dennis Ashilenje (started in fall 2015, graduated in summer 2018; currently Assistant Professor at a University in Kenya)  
Abdelaziz Nilahyane (started in fall 2013, graduated in fall 2016; currently Assistant Professor at Mohammed VI Polytechnic University, Morocco)  
Dhruba Dhakal (started in fall 2011, graduated in summer 2015; currently Agronomy Specialist at State University Missouri, Columbia)

**M.S. Committees: 7 (current 3)**

Ayesha Siddika, Family and Consumer Sciences, started in fall 2021  
David Dorwin Leitz, Department of Animal Science, expected to defend in fall 2022  
Sean Xiang Tang, Department of Ecosystem Science and Management, expected to defend in fall 2022  
Tyler Zenon Jones, Department of Plant Sciences (graduated in spring 2022; currently working as Assistant Farm Manager, UW Sheridan Research and Extension Center)  
Christina Marie Helseth, Department of Plant Sciences, graduated in fall 2020; currently doing PhD in Department of Plant Sciences at UW  
Caleb M. Carter, Department of Plant Sciences (graduated in December 2013; currently working as UW Extension Educator, Wyoming)  
Emily A. Melson, Department of Animal Science

**Ph.D. Committees: 7 (current 1)**

Judith S. Herreid, Department of Plant Sciences, started in fall 2019  
Marshall Tanner Hart, Department of Plant Sciences (graduated in May 2022)  
Wahid Dakhel, Ecosystem Science and Management (graduated in December 2016)  
Beth Fowers, Department of Plant Sciences (graduated in December 2015)  
Brekke L. Peterson, Department of Plant Sciences (graduated in December 2014)

Prakriti Bista, Department of Plant Sciences (graduated in August 2014)  
Azize Homer, Department of Plant Sciences (graduated in May 2013)

**Postdoctoral Fellow: 3**

- Dr. Dennis Ashilenje (fall 2018 – spring 2019; currently Assistant Professor at a University in Kenya)
- Dr. Abdelaziz Nilahyane (fall 2016 – summer 2017; currently Assistant Professor at Mohammed VI Polytechnic University, Morocco)
- Dr. Dhruba Dhakal (summer – fall 2015; currently Agronomy Specialist at State University Missouri, Columbia)

**Visiting Scholars Hosted: 6**

- Dr. Joseph Jimu Baloyi, Fulbright Visiting Scholar, Professor, Head, and Vice Dean, Animal Science, University of Venda, South Africa (March – October, 2021)
- Dr. Surya Acharya, Forage Breeder, Agriculture and Agri-Food Canada (June 2018)
- Dr. Toshihiko Yamada, Professor, Hokkaido University, Japan (March 2017)
- Dr. Lachlan Ingram, Senior Research Fellow in Sustainable Grassland Management, University of Sydney, Australia (July 2012)
- Dr. Wanyu Zhao, Xinjiang Institute of Ecology and Geography, Chinese Academy of Science, China (July-September 2012)
- Dr. Manjula Bandara, Senior Research Scientist, Alberta Agriculture and Rural Development, Brooks, Alberta, Canada (July 2010)