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Education:

- Ph.D., Plant Breeding, Cornell University (minor: Plant Molecular Biology and Plant Pathology), Ithaca, NY
- B.S., Plant Breeding, Faculty of Agriculture, Gadjah Mada University, Indonesia

Professional Preparation and Appointment:

- Associate Professor, Dept. of Soil and Crop Sciences, Texas A&M University, 2018-present
- Assistant Professor, Dept. of Soil and Crop Sciences, Texas A&M University, 2015-2018
- Adjunct Associate Professor/ Adjunct Professor, University of the Philippines Los Baños, 2009-2020
- Scientist/Senior Scientist, International Rice Research Institute (IRRI), Philippines, 2009-2015
- Post-doctoral Research Fellow, IRRI, Philippines, 2005-2008
- Scientist, Indonesian Center for Agricultural Biotechnology and Genetic Resources (ICABIOGRAD), 2003-2005
- Post-doctoral Research Fellow, Cornell University, Ithaca, New York, 2002-2003

Courses Taught:

- Crop Stress Management (SCSC 402)
- Biotechnology for Crop Improvement (SCSC/MEPS/GENE/ 411)
- Analysis of Complex Genomes (SCSC 654 700—distance section)

Synergistic Activities/Professional Service:

- Editorial Board, International Journal of Molecular Science, Molecular Plant Sciences Section (2021-2023)
- Associate Editor, The Crop Journal (2020-2023)
- Associate Editor, Crop Science Journal (2017-2022)
- Grant review panel (USDA-NIFA: AFRI Foundational)
- Member, Crop Science Society of America
- Member, American Society of Plant Biologist
- Member, National Association of Plant Breeders
- Member, International Society of Plant Anaerobiosis (ISPA)
- Life member, Society for the Advancement of Breeding Research in Asia and Oceania
- Member, Science Committee of the 4th International Rice Congress, Bangkok, Thailand
- Member, Local Organizing Committee of the 11th International Conference of ISPA, Los Baños, Philippines
- Delivered various short training lectures in IRRI, Philippines (2008-2015)

Research supervision:

- PhD: Advisor (7→ 5 graduated, 2 ongoing); Committee member (8→ 5 graduated; 3 ongoing); Visiting scholars (3→ 2 graduated)
- MS: Advisor (9→ 6 graduated, 3 ongoing); Committee member (7 → 6 graduated, 1 ongoing)
- 3 Post-doctoral Research Fellows (supervised)

Honor/Awards:

- Crop Science Outstanding Associate Editor (**2020**).
- Plaque of recognition from IRRI for an outstanding contribution to the development of flood tolerance research in rice through the work on genetics and breeding (**2015**).
- Plaque of appreciation from IRRI STRASA project for invaluable contribution to rice research and development of flood-prone areas of South Asia and Africa (**2015**)
- The Rockefeller Foundation graduate student (PhD) scholarship

Selected publications:

1. Liang, Y., S. Biswas, B. Kim, J. Bailey-Serres, **E.M. Septiningsih**. 2021. Improved transformation and regeneration of *indica* rice: disruption of *SUB1A* as a test case via CRISPR-Cas9. ***International Journal of Molecular Sciences*** (in press)
2. Liang, Y., R.E. Tabien, L. Tarpley, A.R. Mohammed, **E.M. Septiningsih**. 2021. Transcriptome profiling of two rice genotypes under mild field drought stress during grain-filling stage. ***AoB Plants*** (in press)

3. Tnani, H., D Chebotarov, R. Thapa, J.C.I. Ignacio, W.K. Israel, S. Dixit, **E.M. Septiningsih**, T. Kretzschmar. 2021. Enriched-GWAS and transcriptome analysis to refine and characterize a major QTL for anaerobic germination tolerance in rice. *International Journal of Molecular Sciences*. 2021, 22, 4445. <https://doi.org/10.3390/ijms22094445>
4. Ignacio, J.C.I., M. Zaidem, C. Casal, S. Dixit, T. Kretzschmar, J.M. Samaniego, M.S. Mendioro, D. Weigel, **E.M. Septiningsih**. 2021. Genetic mapping by sequencing more precisely detects loci responsible for anaerobic germination tolerance in Rice. *Plants*, 10(4), p.705. <https://doi.org/10.3390/plants10040705>
5. Kim, B., R. Piao, G. Lee, E. Koh, Y. Lee, S. Woo, W. Jiang, **E.M. Septiningsih**, M.J. Thomson, H.J. Koh. 2021. OsCOP1 regulates embryo development and flavonoid biosynthesis in rice (*Oryza sativa* L.). *Theoretical and Applied Genetics*, pp.1-15. <https://doi.org/10.1007/s00122-021-03844-9>
6. Thapa, R., R.E. Tabien, M.J. Thomson, **E.M. Septiningsih**. 2020. Genome-wide association mapping to identify genetic loci for cold tolerance and cold recovery during germination in rice. *Frontiers in Genetics*. 11:22. <https://doi.org/10.3389/fgene.2020.00022>
7. Morales, K., N. Singh, F.A. Perez, J.C. Ignacio, R. Thapa, J. Arbalaez, R.E. Tabien, A. Famoso, D.R Wang, **E.M. Septiningsih**, Y. Shi, T. Kretzschmar, S.R. McCouch, M.J. Thomson. 2020. An improved 7K SNP array, the C7AIR, provides a wealth of validated SNP markers for rice breeding and genetic studies. *PLoS ONE*. 15(5): e0232479. <https://doi.org/10.1371/journal.pone.0232479>
8. Sanchez, L. A. Ermolenkov, S. Biswas, **E.M. Septiningsih**, D. Kurouski. 2020. Raman spectroscopy enables non-invasive and confirmatory diagnostics of salinity stresses, nitrogen, phosphorus, and potassium deficiencies in rice. *Frontier in Plant Science*. <https://doi.org/10.3389/fpls.2020.573321>
9. Schaarschmidt, S., A. Fischer, L.M. F. Lawas, R. Alam, **E. M. Septiningsih**, J.Bailey-Serres, S.V.K. Jagadish, B. Huettel, D.K. Hinch, E. Zuther. 2020. Utilizing PacBio Iso-Seq for novel transcript and gene discovery of abiotic stress responses in *Oryza sativa*. *International Journal of Molecular Sciences*. 2020, 21, 8148. <https://doi.org/10.3390/ijms21218148>
10. Mondal, S., F. Entila, M.I.R. Khan, M. G. Miah, S. Dixit, P.C.S. Cruz, M.P. Ali, B. Pittendrigh, **E.M. Septiningsih**, A.I. Ismail. 2020. Responses of AG1, AG2 QTLs and seed-pretreatment on growth and physiological process during anaerobic germination of rice under flooding. *Scientific Reports*. 10:10214. <https://doi.org/10.1038/s41598-020-67240-x>
11. Alam, R., M. Hummel, E. Young, A. Locke, Z. Jia, J.C.I. Ignacio, M.D. Baltazar, A. Ismail, **E.M. Septiningsih**, J. Bailey-Serres. 2020. The flooding resilience loci SUBMERGENCE1 and ANAROBIC GERMINATION1 interact in rice seedlings established underwater. *Plant Direct*. <https://doi.org/10.1002/pld3.240>
12. Singh, A., Y. Singh, A.K. Mahto, M. Negi, R. Singh, N. Yadav, A.K. Singh, P.K. Singh, R. Singh, **E.M. Septiningsih**, H.S. Balyan, N.K. Singh and V. Ray. 2020. Allelic sequence variation in the Sub1A, Sub1B and Sub1C genes among diverse rice cultivars and its association with submergence tolerance. *Scientific Reports*. 10: 8621. <https://doi.org/10.1038/s41598-020-65588-8>
13. Ghosal, S., F.A. Quilloy, C. Casal, **E.M. Septiningsih**, M.S. Mendioro, S. Dixit. 2020. Trait based mapping to identify genetic factors underlying anaerobic germination of rice: Phenotyping, GXE and QTL mapping. *BMC Genetics*. <https://doi.org/10.1186/s12863-020-0808-y>.
14. **Septiningsih, E.M.**, D.J. Mackill. 2018. Genetics and breeding of flooding tolerance in rice. In: Sasaki, T., Ashikari, M. (eds.). *New Waves in Rice Genomics, Genetics, and Breeding*. Springer, Singapore, pp. 275-295.
15. Wilkins, O., S. Hafemeister, A. Plessis, M-M. Holloway-Philips, G. Pham, A. Nicotra, G. Gregorio, S.V. K. Jagadish, **E.M. Septiningsih**, R. Bonneau, M. Purugganan. 2016. EGRINs (Environmental gene regulatory influence networks) in rice that function in the response to water deficit, high temperature and agricultural environments. *Plant Cell* 28: 2365–2384. <https://doi.org/10.1105/tpc.16.00158>
16. Kretzschmar, T., M.A.F. Pelayo, K.R. Trijatmiko, L.F.M. Gabunada, R. Alam, R. Jimenez, M.S. Mendioro, I.H. Slamet-Loedin, N. Sreenivasulu, J. Bailey-Serres, A.M. Ismail, D.J. Mackill, and **E.M. Septiningsih**. 2015. A trehalose-6-phosphate phosphatase enhances anaerobic germination tolerance in rice. *Nature Plants* 1(9). <https://doi.org/10.1038/nplants.2015.124>
17. Plessis, A., C. Hafemeister, O. Wilkins, Z. Jean Gonzaga, R.S. Meyer, I. Pires, C. Müller, **E.M. Septiningsih**, R. Bonneau, M. Purugganan. 2015. Multiple abiotic stimuli are integrated in the regulation of rice gene expression under field conditions. *eLife* 2015;4:e08411. <http://dx.doi.org/10.7554/eLife.08411>