

Michael Kantar
College of Tropical Agriculture and Human Resources
 Tropical Plant and Soil Science
 FTE Distribution: 30% I; 70% R;

Education

<u>Degree</u>	<u>University</u>	<u>Major</u>
PhD, 2013	University of Minnesota	Plant Breeding/Molecular Genetics
MS, 2008	University of Minnesota	Plant Breeding/Molecular Genetics
BS, 2006	University of Minnesota	Applied Plant Science

Professional Appointments

<u>Title</u>	<u>Employer</u>	<u>Dates Employed</u>
Associate Professor	University of Hawaii at Manoa	2021-current
Assistant Professor	University of Hawaii at Manoa	2016-2021
Postdoctoral Fellow	University of British Columbia	2013-2015
Research Associate	University of Minnesota	2013-2015
Visiting Scholar	International Center for Tropical Agriculture (CIAT)	2014
Visiting Scholar	GEMS Informatics Institute University of Minnesota	2024
Visiting Scholar	Purdue Department of Agronomy	2024
Fellow	Beaty Biodiversity Museum	2013-2015
Fellow	Forever Green Initiative, University of Minnesota	2012-Current
Visiting Scholar	International Rice Research Institute (IRRI)	2008
Fellow	Leshner Leadership Institute	2018
Fellow	Sencer Water Institute, Honolulu, HI	2018
Fellow	Migal Institute in the Upper Galilee	2019

Courses Taught

NREM 310-Introduction to Statistics (3)
 TPSS 333 - Understanding Agroecosystems: Visualization, Interpretation, Analysis, and Application (3)
 TPSS 453-Plant Breeding and Genetics (3)
 TPSS 416-Introduction to Social, Ethical, and Political Issues Associated with Biotechnology (3)
 TPSS 603-Experimental Design (4)
 TPSS 615-Quantitative Genomics and Evolution (3)
 TPSS 667-Seminar in tropical plant and soil sciences (1)
 TPSS 667-World Food Problems: Evaluating Starvation (1)
 TPSS 711- Statistics of Time and Space (2)

Publications

Books

- Green, S., Williams, K. Marek, L., Kantar, M., Khoury, C. (Ed) Crop Wild Relatives of North America. 2018. Volume 1. Springer International Publishing. Cham, Switzerland. DOI: 10.1007/978-3-319-95101-0
- Green, S., Williams, K. Marek, L., Kantar, M., Khoury, C. (Ed) Crop Wild Relatives of North America. 2018. Volume 2. Springer International Publishing. Cham, Switzerland. DOI: 10.1007/978-3-319-97121-6

Book Chapters

- Thompson, A., Kantar, M., Rainey, K. (2022). Designing Experiments for Physiological Phenomics. In: Lorence, A., Medina Jimenez, K. (eds) High-Throughput Plant Phenotyping. Methods in Molecular Biology, vol 2539. Humana, New York, NY. https://doi.org/10.1007/978-1-0716-2537-8_14

2. Bock, D, Kantar, MB, Rieseberg, L. 2020. The population genomics of speciation and adaptation in sunflowers. In: Population Genomics. Springer, Cham. https://doi.org/10.1007/13836_2020_85
3. Miyasaka SC, Bellinger MR, Kantar MB, Helmkampf M, Wolfgruber T, Paudel R, Shintaku M. 2019. Genetic Diversity in Taro (*Colocasia esculenta*). In Genetic Diversity in Horticultural Plants (pp. 191-215). Springer, Cham.
4. Anderson, JE, Campbell, A, Kantar, MB. Crop Wild Relatives of North American Root Vegetables. Chapter 8. In Green, S. (Ed) Crop Wild Relatives of North America: Volume 2. Springer International Publishing. Cham, Switzerland.
5. McCoy, JA, Young, JH, Nifong, JM, Hummer, K, DeNoma, J, Avendaño-Arrazate, CH, Kantar, MB, Greene, SL. Species for medicinal and social use with an emphasis on *Theobroma cacao* L. (cacao), *Nicotiana tabacum* L. (tobacco), *Actaea racemosa* L. (black cohosh), *Humulus lupulus* L. (Hops). Chapter 19. In Green, S. (Ed) Crop Wild Relatives of North America: Volume 2. Springer International Publishing. Cham, Switzerland.
6. Khoury, CK, Greene, SL, Williams, KA, Kantar, MB, Marek, LF. Conservation and Use of the North American Plant Cornucopia: The Way Forward. Chapter 20. In Green, S. (Ed) Crop Wild Relatives of North America: Volume 2. Springer International Publishing. Cham, Switzerland.
7. Kantar, MB, Hubner, S, Rieseberg, LH. 2016. Broadening the genetic basis for crop improvement: Interspecific hybridization within and between ploidy levels in *Helianthus*. In Mason, A.S. (Ed) Polyploidy and Interspecific Hybridization for Crop Improvement, CRC Press, Boca Raton, United States of America.

Refereed Journal Publications

1. **Kantar, M.**, Ewing, P., Bančić, J., Fumia, N., Garba, I., Jamshidi, S., Jannink, J.-L., Jha, P., Jungers, J., Pathak, H., Paul, S. S., Raghavan, B., Runck, B., Singh, J., Subedi, S., Joshi, V., & Wang, D. (2025). Computational design for more engaged, impactful, and dynamic agricultural research. *Crop Science*, 65, e70034. <https://doi.org/10.1002/csc2.70034>
2. Halpin-McCormick, A, Maaz, T, **Kantar, MB**, Barton, K, Masalia, RR, Law, K. (2025) Species distribution of *Cannabis sativa*: Past, present and future. *PLoS ONE* 20(3): e0306007. <https://doi.org/10.1371/journal.pone.0306007>
3. Campbell, Q, Bedford, JA, Castaneda-Alvarez, N, Ortiz-Barrientos, D, Gao, L, Yu, Y, Neyhart, J, Wang, DR, Rieseberg, L, Chapman, MA, **Kantar, MB**. 2025. Agricultural landscape genomics to increase crop resilience. *Plant Communications*.
4. Gall, L, Glancy, T, **Kantar, MB**, Runck B. 2024. A tool for integrating agrometeorological observation data for digital agriculture: A Minnesota Case Study. *Agric Environ Lett*. 2024;9:e20147. <http://dx.doi.org/10.1002/acl2.20147>
5. Fumia, N., Zenil-Ferguson, R., Wolfe, M., **Kantar, M.** (2024). Simulated exploration of parameter space and resource allocation for strategic creation of neo-domestication breeding programs. *Crop Science*, 1–15. <https://doi.org/10.1002/csc2.21359>
6. Bartlett, B, Zamora, C, Bingham, JP, Hubbard, ASE, Tseng, M, Runck, BY, **Kantar, MB**. 2024. Journal influence on the short- and long-term trajectories of science. *Data and Information Management*, 100079.
7. Pratt, R, **Kantar, MB**, Fumia, N, Nankar, AN. 2024. From wild to mild and back again: genetic diversity, crop improvement strategies and our shared cultural heritage with chile. *Front. Hortic*. 3:1409398. doi: 10.3389/fhort.2024.1409398
8. Nandkangre, H, Zongo, KF, Kambou, DJ, Ouoba, PE, **Kantar, MB**, McCormick, Missihoun, AA, Ouoba, A, Sawadogo, N, Ouedraogo, M. 2024. Exploratory Study of Fertilizer Effect on Growth, Yield, and Attributes and Yield Response of Local and Improved Bambara Groundnut Varieties on Ferric Lixisol, Burkina Faso. *Int. J. Adv. Res.* 12(06), 980-988.
9. Ahmad, AA, Radovich, TJK, Sugano, J, Wang, KH, Hue, N, Uyeda, J, Wages, SA, Tavares, K, Kirk, E, **Kantar, MB**. 2024. Evaluating the Yield of Three Legume Crop Varieties under Hawaii's Micro-Climates. *Crops*, 4(2), pp.242-255.
10. McCormick, AH, Lucas, S, Keach, J, **Kantar, MB**, Motomura-Wages, S, Miyasaka, SC. 2024. *HortTechnology*, 34(4), 448-458. <https://doi.org/10.21273/HORTTECH05421-24>

11. Halpin-McCormick, A, Heyduk, K, Barton, K, **Kantar, MB**, Masalia, RR, Law, K, Kuntz, EJ. 2024. Examining population structure across multiple collections of Cannabis Crop Evolution and Genetic Resources. <https://doi.org/10.1007/s10722-024-01928-1>
12. Pejhanmehr, M, Yorkston, M, **Kantar, MB**, Morden, CW. 2024. Population genetics of *Sida fallax* Walp. (Malvaceae) in the Hawaiian Islands. *Front. Plant Sci.*, 29. Sec. Plant Systematics and Evolution. <https://doi.org/10.3389/fpls.2024.1304078>
13. Fumia, N., Nair, R., Lin, Y.-P., Lee, C.-R., Chen, H.-W., von Wettberg, E. B., **Kantar, M.**, Schafleitner, R. 2023. Leveraging genomics and phenomics to accelerate improvement in mungbean: A case study in how to go from GWAS to selection. *The Plant Phenome Journal*, 6, e20088. <https://doi.org/10.1002/ppj2.20088>
14. Ewing, P. M., **Kantar, M. B.**, Killian, E., Neyhart, J., Sherman, J., Williams, J., Lachowiec, J., Eberly, J. (2023). Local adaptation and broad performance are synergistic to productivity in modern barley. *Crop Science*, 00, 00–00. <https://doi.org/10.1002/csc2.21168>
15. Paull, R. E., Ksouri, N., **Kantar, M.**, Zepa-Catanho, D., Chen, N. J., Uruu, G., Yue, J., Guo, S., Zheng, Y., Wai, C. M. J., & Ming, R. (2023). Differential gene expression during floral transition in pineapple. *Plant Direct*, 7(11), e541. <https://doi.org/10.1002/pld3.541>
16. Fu, X, Lidar, A, **Kantar, MB**, Raghavan, B. 2023. Edible fire buffers: Mitigation of wildfire with multifunctional landscapes, *PNAS Nexus*, Volume 2, Issue 10, pgad315, <https://doi.org/10.1093/pnasnexus/pgad315>
17. **Kantar, MB**, Wang, D, Hale, I, Pratt, R, Jensen, JV, Lewenstein, BV. (2023). Improving agricultural science communication through intentionality. *Agricultural & Environmental Letters*, 8,e20115. <https://doi.org/10.1002/acl2.20115>
18. Martínez-Ainsworth, N. E., Scheppler, H., Moreno-Letelier, A., Bernau, V., **Kantar, M. B.**, Mercer, K. L., Jardón-Barbolla, L. (2023). Fluctuation of ecological niches and geographic range shifts along chile pepper's domestication gradient. *Ecology and Evolution*, 13, e10731. <https://doi.org/10.1002/ece3.10731>
19. Gao, L., **Kantar, M.B.**, Moxley, D., Ortiz-Barrientos, D., Rieseberg, L. H. (2023). Crop Adaptation to Climate Change: An Evolutionary Perspective. *Molecular Plant*. <https://doi.org/10.1016/j.molp.2023.07.011>
20. Bartlett, B, **Kantar, MB**, Stitt-Bergh, M, Bingham, JP. 2023. Integrating Data Science to Strengthen Undergraduate Research Curricula. *Biochemistry and Molecular Biology Education*. DOI: 10.1002/bmb.21762
21. Wang, D., **Kantar, MB**, Murugaiyan, V, Neyhart, J. 2023. Where the wild things are: Genetic associations of environmental adaptation in the *Oryza rufipogon* species complex (ORSC). *G3: Genes, Genomes, Genetics*, jkad128.
22. Adhikari, M, **Kantar, MB**, Longman, RJ, Lee, CN, Oshiro, M, Caires K, He, Y. 2023. Genome-wide association study for carcass weight in pasture-finished beef cattle in Hawai'i. *Frontiers in Genetics*, 14, 1168150.
23. Jungers, J, Runck, B, Ewing, PM, Maaz, T, Carlson, C, Neyhart, J, Fumia, N, Bajgain, P, Subedi, S, Sharma, S, Senay, S, Hunter, M, Cureton, C, Gutknecht, J, **Kantar, M.** 2023. Adapting Perennial grain and oilseed Crops for Climate Resiliency. *Crop Science*
24. Fumia, N, **Kantar, MB**, Lin, YP, Schafleitner, R, Lefebvre, V, Paran, I, Börner, A, Diez, MJ, Prohens, J, Bovy, A, Boyaci, F, Pasev, G, Tripodi, P, Barchi, L, Giuliano, G, Barchenger, DW. 2023. Exploration of high-throughput data for heat tolerance selection in *Capsicum annuum*. *The Plant Phenome Journal*, 6(1), e20071.
25. Runck, B, Streed, A, Ewing, P, **Kantar, MB**, Wang, D, Raghavan, B. 2023. State spaces for agriculture: A meta-systematic design automation framework. *PNAS nexus*, 2(4), pgad084.
26. McCoy, J, Martínez, N, Bernau, V, Scheppler, H, Hedblom, G, Adhikari, A, McCormick, A, **Kantar, MB**, Jardón-Barbolla, L, McHale, L, Mercer, K, Baumler, D. 2023. Population structure in diverse pepper (*Capsicum* spp.) accessions. *BMC Res Notes* 16, 20 <https://doi.org/10.1186/s13104-023-06293-3>

27. Blenis, N, Nguyen, H, McClellan Maaz, T, **Kantar, MB**. 2023. *Biochar Production, Modification, and Its Uses in Soil Remediation: A Review. Sustainability*, 15, 3442.
<https://doi.org/10.3390/su15043442>
28. Bessho-Uehara, K, Masuda, K, Wang, DR, Angeles-Shim, RB, Obara, K, Nagai, K, Murase, R, Aoki, S, Furuta, T, Miura, K, Wu, JZ, Yamagata, Y, Yasui, H, **Kantar, MB**, Yoshimura, A, Kamura, T, McCouch, SR, Ashikari, M. *REGULATOR OF AWN ELONGATION 3*, an E3 ubiquitin ligase, is responsible for loss of awns during African rice domestication. 2023. *Proceedings of the National Academy of Sciences*, 120(4), e2207105120.
29. Dhungana, I, **Kantar, MB**, Nguyen NH. 2023. *Root exudate composition from different plant species influences the growth of rhizosphere bacteria. Rhizosphere. Volume 25*, 100645.
<https://doi.org/10.1016/j.rhisph.2022.100645>
30. Frazier, AG, Yen, BT, Stuecker, MF, Nelson, K, Sander, BO, Fox, J, **Kantar, MB**, Wang, D. *A multi-scale analysis of historical climate variability and rice production in Mainland Southeast Asia. Anthropocene*, <https://doi.org/10.1016/j.ancene.2022.100353>.
31. Tavares K, Kirk E, Motomura-Wages S, Calpito J, Bingham J-P, Ahmad AA, Flanagan K, Uyeda J, **Kantar MB**, Radovich TJK. 2022. *Genotypic and Environmental Influence on Fresh Rhizome Yield of Turmeric (Curcuma longa L.). Agronomy*. 12(11):2703.
<https://doi.org/10.3390/agronomy12112703>
32. Paudel, R, Bartlett, B, Zamora, CM, Keach, J, Coarite-Gutierrez, R, Hawkins, J, Ahmad, A, Motomura-Wages, S, Kirk, ER, **Kantar, MB**, Lamour, KH, Shintaku, M, Miyasaka, S. 2022. *Breeding and selection of taro (Colocasia esculenta) for improved disease-resistance in Hawai'i. Plants, People, Planet*.
33. Carlson, K, Mora, C, Xu, J, Setter, RO, Harangody, M, Franklin, EC, **Kantar, MB**, Lucas, M, Menzo, ZM, Spirandelli, D, Schanzenbach, D, Warr, CC, Wong, AE, Businger, S. 2022. *Global rainbow distribution under current and future climates. Global Environmental Change*, 77, 102604.
34. Paull, RE, Zerpa-Catanho, D, Chen, NJ, Uruu, G, Wai, CMJ, **Kantar, MB**. *Taro Raphide-Associated Proteins: Profilin, Allergens and Crystal Growth. Plant Direct*. DOI: 10.1002/pld3.443
35. Neyhart, J, **Kantar, MB**, Zalapa, J, Vorsa, N. *Genomic patterns of local adaptation in wild cranberry (Vaccinium macrocarpon Ait.) G3*, jkac203, <https://doi.org/10.1093/g3journal/jkac203>
36. Thompson, A., **Kantar, M.**, Rainey, K. (2022). *Designing Experiments for Physiological Phenomics*. In: Lorence, A., Medina Jimenez, K. (eds) *High-Throughput Plant Phenotyping. Methods in Molecular Biology*, vol 2539. Humana, New York, NY. https://doi.org/10.1007/978-1-0716-2537-8_14
37. McCoy JE, McHale LK, **Kantar M**, Jardón-Barbolla L, Mercer KL. 2022. *Environment of origin and domestication affect morphological, physiological, and agronomic response to water deficit in chile pepper (Capsicum sp.). PLOS ONE* 17(6): e0260684.
<https://doi.org/10.1371/journal.pone.0260684>
38. Maaz, T, Nguyen, N, Del Valle Echevarria, AR, **Kantar, MB**, Mileyko, Y, Muszynski, M. 2022. *Initiating project-based interdisciplinary research education in the agricultural sciences. Natural Science Education*. e20076
39. Lincoln, N, Anderson, T, **Kantar, MB**, You, Q, Wang, J. 2022, *Diversity and Value of Extant Hawaiian Sugarcane (Saccharum spp. [L.] Cultivars. Economic Botany*, 1-15.
40. Fumia, N, Rubinoff, D, Zenil-Ferguson, R, Khoury, C, Pirinon, S, Gore, M, **Kantar, MB**. 2022. *The intersection of mating system and ploidy in driving ecological niche diversity using wild potatoes (Solanum section Petota) as a model. R. Soc. Open Sci.* 9: 211862.
doi.org/10.1098/rsos.211862
41. Sirabis WCL, **Kantar MB**, Radovich T, Lincoln NK. 2022. *Nitrogen Dynamics and Sweet Potato Production under Indigenous Soil Moisture Conservation Practices in the Leeward Kohala Field System, Hawai'i Island. Soil Systems*.6(1):16. <https://doi.org/10.3390/soilsystems6010016>

42. Fumia, N, Pirinon, S, Rubinooff, D, Zenil-Ferguson, R, Khoury, C, Gore, M, **Kantar, MB**. 2022. *Wild relatives of potato may bolster its adaptation to new niches under future climate scenarios*. *Food and Energy Security*, 00, e360. <https://doi.org/10.1002/fes3.360>
43. MacQueen, AH, Khoury, CK, Miklas, P, McClean, PE, Osorno, JM, Runck, BC, White, JW, **Kantar, MB**, Ewing, PM. 2022. *From local to continent-scale variation in yield heritability in common bean (Phaseolus vulgaris)*. *Crop Science*, 1– 13. <https://doi.org/10.1002/csc2.20694>
44. Joo, K, Muszynski, M, **Kantar, MB**, Del Valle Echevarria, AR. 2021. *Using CRISPR for tropical crop improvement: A decision process for fitting genome engineering to your species*. *Front. Genet.* <https://doi.org/10.3389/fgene.2021.786140>
45. Minter, M, Nielsen, ES, Blyth, C, Bertola, LD, **Kantar, MB**, E Morales, HE, Orland, C, Segelbacher, G, Leigh, DM. 2021. *What is genetic diversity and why does it matter?* *Frontiers for Young Minds*. DOI: 10.3389/frym.2021.656168
46. Del Valle Echevarria, AR, Fumia, N, Gore, MA, **Kantar, MB**. 2021. *Accelerating Crop Domestication in the Era of Gene Editing*. *Plant Breeding Reviews*, Volume 45, 185.
47. Anderson, T, Radovich, T, Bingham, J-P, Sinclair, N, Bryant, G, **Kantar, MB**. 2021. *Evaluation of Hawaiian Heritage Sweet Potato (Ipomoea batatas (L.) Lam.) Breeding Lines*. *Agronomy*, 11, 1545. <https://doi.org/10.3390/agronomy11081545>
48. Steed, A., Tomlinson, B, **Kantar, MB**, Raghavan, B. 2021. *How Smart is the Smart Farm?* In *Proceedings of the 8th International Conference on ICT for Sustainability*
49. Wolfe, M, Jannick, JL, **Kantar, MB**, Santantonio, N. 2021. *Multi-species genomics-enabled selection for improving agroecosystems across space and time*. *Frontiers in Plant Science*, 12, 1079.
50. Wang, DR, Imel RK, Paull RE, **Kantar, MB**. *An online learning module for plant growth analysis using high-throughput phenotyping data*. *Nat Sci Educ*. 50:1 <https://doi.org/10.1002/nse2.20056>
51. Maaz, T, Sapkota, T, Eagle, A, **Kantar, M**, Bruulsema, T, Majumdar, K. 2021. *Meta-analysis of yield and nitrous oxide outcomes of nitrogen management in agriculture*. *Global Change Biology*. <https://doi.org/10.1111/gcb.15588>
52. Hubner, S, **Kantar, MB**. 2021. *Tapping diversity from the wild: sampling, characterizing and implementing*. *Front. Plant Sci.*, 27. <https://doi.org/10.3389/fpls.2021.626565>.
53. Fortin, J, Bartlett, B, **Kantar, MB**, Tseng, M, Mehrabi, Z. 2021. *Digital technology helps remove gender bias in academia*. *Scientometrics*. <https://doi.org/10.1007/s11192-021-03911-4>
54. Winnicki, E, Kagawa-Viviani, A, Perez, K, Radovich, T, **Kantar, MB**. 2021. *Characterizing the Diversity of Hawai'i Sweet Potatoes (Ipomoea batatas [L.] Lam.)*. *Econ Bot.* <https://doi.org/10.1007/s12231-020-09511-2>
55. La Valle, FF, **Kantar, MB**, Nelson, CE. 2020. *Coral reef benthic community structure is associated with the spatiotemporal dynamics of submarine groundwater discharge chemistry*. *Limnol Oceanogr.* <https://doi:10.1002/lno.11596>
56. Tomiyama, J, Takagi, D, **Kantar, M**. 2020. *The Effect of an Acute Food Shortage on Human Population Dynamics in a Subsistence Setting*. *Agric & Food Secur* 9, 6. <https://doi.org/10.1186/s40066-020-00261-x>
57. Viruel, J, **Kantar, MB**, Gargiulo, R, Hesketh-Prichard, P, Leong, N, Cockel, C, Forest, F, Gravendeel, B, Pérez-Barrales, R, Leitch, IJ, Wilkin, P. 2020. *Crop Wild Phylorelatives (CWPs): towards an integrative classification of crop wild relatives using phylogenetic distance and ploidy level as indicators of cross-compatibility*. *Botanical Journal of the Linnean Society*. <https://doi.org/10.1093/botlinnean/boaa064>
58. Pironon, S, Borrell, JS, Ondo, I, Douglas, R, Phillips, C, Khoury, CK, **Kantar, MB**, Fumia, N, Soto Gomez, M, Viruel, J, Govaerts, R, Forest, F, Antonelli, A. 2020. *Toward Unifying Global Hotspots of Wild and Domesticated Biodiversity*. *Plants* 9 (9), 1128.
59. El-Sabaawi, R, **Kantar, MB**, Moore, T, Pantel, JH, Tseng, M, Ware, J. 2020. *The EEB POC Project*. *Limnology and Oceanography Bulletin*. <https://doi.org/10.1002/lob.10390>
60. Tseng, M, El-Saabawi, R, **Kantar, MB**, Pantel, JH, Srivastava, D, Ware, J. 2020. *Strategies and*

- support for Black, Indigenous, and people of colour in ecology and evolutionary biology. *Nature Ecology and Evolution*. <https://doi.org/10.1038/s41559-020-1252-0>
61. Bellinger, MR, Paudel, R, Starnes, S, Kambic, L, Geib, S, Sim, S, Wolfgruber, T, Miyasaka, S, Lamour, K, Helmkampf, M, **Kantar, MB**, Shintaku, M. 2020. Taro genome assembly and linkage map reveal QTLs for resistance to Taro Leaf Blight. *G3: Genes, Genomes, Genetics*. <https://doi.org/10.1534/g3.120.401367>
 62. Runck, B, Khoury, C, Ewing, P, **Kantar, MB**. 2020. The hidden land use cost of upscaling cover crops. *Commun Biol* 3, 300. <https://doi.org/10.1038/s42003-020-1022-1>
 63. Del Valle Echevarria, AR, Campbell, A, Radovich, TJK, Silvasy, T, Moore, S, **Kantar, MB**. 2020. Genotype-by-Sequencing (GBS) to establish a tropical pumpkin (*Cucurbita moschata*) breeding population for organic production systems. *Horticulturae*, 6, 14. <https://doi.org/10.3390/horticulturae6010014>
 64. Ewing, P, Runck, B, Kono, TYJ, **Kantar, MB**. 2019. The home field advantage of modern plant breeding. *PloS one*, 14(12). <https://doi.org/10.1371/journal.pone.0227079>
 65. Anderson, J, **Kantar, MB**, Bock, D, Chaw Grubbs, K, Schilling, E, Rieseberg, L. 2019. Skim-Sequencing Reveals the Likely Origin of the Enigmatic Endangered Sunflower *Helianthus schweinitzii*. *Genes*, 10(12), 1040; <https://doi.org/10.3390/genes10121040>
 66. Khoury, CK, Barchenger, DW, Carver, D, Barboza, G, van Zonneveld, M, Jarret, R, Bohs, L, **Kantar, MB**, Uchanski, M, Mercer, K, Nabhan, GP, Bosland, PW, Greene, SL. *Crop wild relatives of chile pepper (Capsicum L.): Distributions, conservation status, and implications for adaptations to abiotic stresses*. Diversity and Distributions. doi.org/10.1111/DDI.13008
 67. Ekar, JM, Betts, KJ, Herman, AC, Stupar, RM, Wyse, DL, Brandvain, Y, **Kantar, MB**. Domestication in real time: The curious case of a trigenomic sunflower population. *Agronomy*, 9(11), 704. <https://doi.org/10.3390/agronomy9110704>
 68. **Kantar, MB**, Runck, B. Take a walk on the wild side. *Nature Climate Change*, 9 (10), 731–732. <http://dx.doi.org/10.1038/s41558-019-0581-y>
 69. Mora, C, Rollins, R, Taladay, K, **Kantar, MB**, Chock, MK, Shimada, M, Franklin, EK. 2019. Limitations to estimating carbon emissions from Bitcoin mining. *Nature Climate Change*. 9: 658–659.
 70. Khoury, CK., Kisel, Y, **Kantar, MB**, Barber, E, Ricciardi, V, Klirs, C, Kucera, L, Mehrabi, Z., Johnson, N, Klabin, S, Valiño, A, Nowakowski, K, Bartomeus, I, Ramankutty, N, Miller, A, Schipanski, M, Gore, MA, Ari Novy, A. 2019. *Science - graphic art partnerships to increase research impact*. Communications Biology volume 2, Article number: 295. doi: <https://doi.org/10.1038/s42003-019-0516-1>
 71. Viruel, J, Conejero, M, Hidalgo, O, Pokorny, L, Powell, RF, Forest, F, **Kantar, MB**, Soto Gomez, M, Graham, SW, Gravendeel, B, Wilkin, P, Leitch, IJ. 2019. A target capture-based method to estimate ploidy from herbarium specimens. *Front. Plant Sci.* 10:937 doi: [10.3389/fpls.2019.00937](https://doi.org/10.3389/fpls.2019.00937)
 72. Del Valle-Echevarria, AR, **Kantar, MB**, Branca, J, Moore, S, Frederiksen, MK, Hagen, L, Hussain, T, Baumler, DJ. 2019. *Aeroponic Cloning of Capsicum spp.* *Horticulturae* 5(2), 30; <https://doi.org/10.3390/horticulturae5020030>
 73. Soto Gomez, MF, Pokorny, L, **Kantar, MB**, Forest, F, Leitch, IJ, Gravendeel, B, Paul Wilkin, Graham, SW, Viruel, J. 2019. A customized nuclear target enrichment approach for developing a phylogenomic baseline for *Dioscorea* yams (*Dioscoreaceae*). *Applications in Plant Science*. <https://doi.org/10.1002/aps3.11254>
 74. Mehrabi, Z, Pironon, S, **Kantar, MB**, Ramankutty, N, Rieseberg, L. 2019. Shifts in the abiotic and biotic environment of cultivated sunflower under future climate change. *OCL*, 26: 9 doi: <https://doi.org/10.1051/ocl/2019003>
 75. **Kantar, MB**, Runck, B, Raghavan, B, Joglekar, AB, Senay, S, Krohn, B, Neyhart, J, Bradeen, J, Soto Gomez, M, Kjelgren, R. 2019. The Many-Faced Janus of Plant Breeding. *Plants, People, Planets*. doi: <https://doi.org/10.1002/ppp3.3031>.

76. Kagawa-Viviani, A, Levin, P, Johnston, E, Ooka, J, Baker, J, **Kantar, MB**, Lincoln, NL. 2018. I Ke Ēwe ‘Āina o Ke Kupuna: Hawaiian Ancestral Crops in Perspective. Sustainability. 10(12), 4607. <https://doi.org/10.3390/su10124607>
77. Mora, C, Spirandelli, D, Franklin, EC, Lynham, J, **Kantar, MB**, Miles, W, Smith, CZ, Freel, K, Moy, J, Louis, LV, Barba, EW, Bettinger, K, Frazier, A, Colburn IX, JF, Hanasaki, N, Hawkins, E, Hirabayashi, Y, Knorr, W, Little, CM, Emanuel, K, Sheffield, J, Patz, JA, Hunter, CL. 2018. *Broad threat to humanity from cumulative climate hazards intensified by greenhouse gas emissions. Nature Climate Change.* doi: <https://doi.org/10.1038/s41558-018-0315-6>
78. Mora, C, Rollins, R, Taladay, K, **Kantar, MB**, Chock, MK, Shimada, M, Franklin, EC. 2018. *Bitcoin emissions alone could push global warming above 2°C. Nature Climate Change.* doi: <https://doi.org/10.1038/s41558-018-0321-8>
79. **Kantar, MB**, Hübner, S, Herman, A, Bock, DG, Baute, G, Betts, K, Ott, M, Brandvain, Y, Wyse, D, Stupar, RM, Rieseberg, LH. Neo-Domestication of an Interspecific Tetraploid Helianthus annuus × Helianthus tuberosus Population That Segregates for Perennial Habit. Genes 2018, 9(9), 422; <https://doi.org/10.3390/genes9090422>
80. **Kantar, MB**, Bruford, MW, Rieseberg, LH. 2018. *The Genomics of Domestication.* Evol Appl. <https://doi.org/10.1111/eva.12693>
81. Stuecker MF, Tigchelaar M, **Kantar MB**. 2018. *Climate variability impacts on rice production in the Philippines.* PLOS ONE 13(8): e0201426. <https://doi.org/10.1371/journal.pone.0201426>
82. Taitano, N, Bernau, V, Jardón-Barbolla, L, Leckie, B, Mazourek, M, Mercer, K, McHale, L, Michel, A, Baumler, D, **Kantar, MB**, van der Knaap, E. 2018. *Genome-wide Genotyping of a Novel Mexican Chile Pepper Collection Illuminates the History of Landrace Differentiation after Capsicum annuum L. Domestication.* Evolutionary Applications. <https://doi.org/10.1111/eva.12651>
83. Bock, DG, **Kantar MB**, Caseys, C, Matthey-Doret, R, Rieseberg, LH. 2018. *Evolution of invasiveness by genetic accommodation.* Nature Ecology & Evolution. <https://doi.org/10.1038/s41559-018-0553-z>
84. Bandillo, NB, Anderson, JE, **Kantar, MB**, Stupar, RM, Specht, JE, Graef, GL, Aaron J. Lorenz, AJ. 2017. *Dissecting the Genetic Basis of Local Adaptation in Soybean.* Scientific Reports 7, Article number: 17195
85. **Kantar, MB**, Nashoba, AR, Anderson, JE, Blackman, BK, Rieseberg, LH. 2017. *The Genetics and Genomics of Plant Domestication.* BioScience, 67(11), 971-982.
86. Helmkampf, M, Wolfgruber, TK, Bellinger, MR, Paudel, R, **Kantar, MB**, Miyasaka, SC, Kimball, H, Veillet A, Read, A, Shintaku, M. 2017. *Phylogenetic relationships, breeding implications, and cultivation history of Hawaiian taro (Colocasia esculenta) through genome-wide SNP genotyping.* Journal of Heredity, 1, 11.
87. **Kantar, MB**, Anderson, JE, Lucht, SA, Mercer, K, Bernau, V, Case, KA, Le, NC, Frederiksen, MK, DeKeyser, HC, Wong, ZZ, Hastings, JC, Baumler, DJ. 2016. *Vitamin Variation In Capsicum Spp. Provides Opportunities To Improve Nutritional Value Of Human Diets.* PLoS ONE 11(8): e0161464. <https://doi.org/10.1371/journal.pone.0161464>
88. DeHaan, LR, Van Tassel, DL, Anderson, J, Culman, S, Larson, S, Marks, D, Ryan, M, Wyse, D, Zhang, X, Rude, E, Poland, J, Asselin, S, Cattani, D, Dorn, K, Baute, G, Hulke, B, **Kantar, MB**, Ravetta, D. 2016. *A Pipeline Strategy for Crop Domestication.* Crop Science, 56(3), 917-930.
89. **Kantar, MB**, C. Tyl, C, Dorn, K, Zhang, X, Jungers, J, Kaser, J, Schendel, R, Eckberg, J, Runck, B, Bunzel, M, Jordan, N, Stupar, RM, Marks, D, Anderson, J, Johnson, G, Sheaffer, C, Schoenfuss, T, Ismail, B, Heimpel, G, Wyse, D. 2016. *Perennial Grain and Oilseed Crops.* Annu. Rev. Plant Biol. 2016. 67:703–29.
90. Anderson, J, Kono, T, Stupar, R, **Kantar, MB**, Morrell, P. 2016. Environmental association analyses identify candidates for abiotic stress tolerance in Glycine soja, the wild progenitor of cultivated soybeans. G3; 6:835-843.
91. Curtin, SJ, Michno, JM, Campbell, BW, Gil-Humanes, J, Mathioni, S, Donohue, RC, **Kantar,**

- MB**, Eamens, AL, Meyers, B, Voytas, DF, Stupar, RM. 2016. *miRNA maturation and target transcript regulation are severely disrupted in soybean dicer-like1 double mutants*. G3 6:423-433.
92. **Kantar, MB**, Khoury, C, Castañeda Alvarez, NP, Kane, N, Marek, L, Sieler, G, Camilo Sosa, C, Archicanoy, H, Bernau, V, Rieseberg, LH. 2015. *Ecogeography and utility to plant breeding of the crop wild relatives of sunflower (Helianthus annuus L.)*. Frontiers in plant science, 6.
 93. Johnson, G, **Kantar, MB**, Betts, K, Wyse, D. 2015. Field Pennycress Production and Weed Control in a Double Crop System with Soybean in Minnesota. Agronomy Journal. 107:532-540.
 94. Runck, BC, **Kantar, MB**, Jordan, NR, Eckberg, JO, Barnes, RJ, Lehman, CI, DeHaan, LR, Stupar, RM, Sheaffer, CC, Porter, PM, Anderson, J, Wyse, DM. 2014. *The Reflective Plant Breeding Paradigm: A Robust System of Germplasm Development to Support Strategic Diversification of Agroecosystems*. Crop Science. 54:5, 1939-1948.
 95. Anderson, JE, **Kantar, MB**, Stec, AO, Kono, TY, Song, Q, Cregan, PB, Specht, JE, Diers, BW, McHale, LK, Stupar, RM. 2014. *A roadmap for functional structural variants in the soybean genome*. G3. 4:1307-1318.
 96. **Kantar, MB**, Porter, PM. 2014. Relationship between planting date, growing degree days and the winter rye (*Secale cereale* L.) variety “Rymin” in Minnesota. Crop Management 13:–. doi:10.2134/CM-2013-0096-R
 97. **Kantar, MB**, Baute, GJ, Bock, DG, Rieseberg, LH. 2014. *Genomic variation in Helianthus: Learning from the past looking to the future*. Briefings in Functional Genomics. <https://doi.org/10.1093/bfpg/elu004>
 98. **Kantar, MB**, Betts, K, Michno, J-MS, Luby, JJ, Morrell, PL, Hulke, BS, Stupar, RM, Wyse, DL. 2014. Evaluating an interspecific *Helianthus annuus* x *Helianthus tuberosus* population for use in a perennial sunflower breeding program. Field Crops Research 155, 254–264.
 99. **Kantar, MB**, Betts, K, Hulke, BS, Stupar, RM, Wyse, D. 2012. Breaking Tuber Dormancy in *Helianthus tuberosus* L. and Interspecific Hybrids of *Helianthus annuus* L. x *Helianthus tuberosus*. HortScience: 47:1342-1346
 100. Curtin SJ, **Kantar MB**, Yoon HW, Whaley AM, Schlueter JA, Stupar RM. 2012. *Co-expression of soybean Dicer-like genes in response to stress and development*. Funct Integr Genomics 12: 671–682.
 101. Gillitzer, P, Martin, AC, **Kantar, MB**, Kauppi, K, Dahlberg, S, Lis, D, Kurle, J, Sheaffer C, and Wyse, D. 2012. *Optimization of screening of native and naturalized plants from Minnesota for antimicrobial activity*. Journal of Medicinal Plants Research Vol. 6(6), pp. 938–949, 16 February, 2012 <https://doi.org/10.5897/JMPR10.710>
 102. **Kantar, MB**, Sheaffer, C, Porter, P, Krueger, E, and Ochsner, TE. 2011. *Growth stage influences forage yield and quality of winter rye*. Forage and Grazinglands <https://doi.org/10.1094/FG-2011-0126-01-RS> .
 103. Krueger, E, Ochsner, T, **Kantar, MB**, Sheaffer, C, and Porter, P. 2010. *Growth stage at harvest of a winter rye cover crop influences soil moisture and nitrogen*. Crop Management <https://doi.org/10.1094/CM-2010-1014-01-RS> .

Creative Works

Popular Press Articles

1. NY Times Guest Essay - <https://www.nytimes.com/2025/03/22/opinion/doge-elon-musk-usda-crops.html>
2. <https://phys.org/news/2020-06-sustainable-cover-crop-farming-big-limitation.html>
3. <https://www.aaas.org/news/making-engagement-easier-others-matching-scientists-artists-and-students>

4. <https://www.aaas.org/programs/center-public-engagement-science-and-technology/reflections/power-infographics-pairing>
5. <https://sustainable-secure-food-blog.com/2018/09/21/yams-a-main-staple-in-africa-asia/>
6. <https://seedworld.com/michael-kantar-on-how-netflix-is-changing-plant-breeding/>
7. <https://www.theatlantic.com/science/archive/2018/08/amaizeballs/567140/>
8. www.aaas.org/news/public-engagement-helps-scientists-tackle-global-challenges
9. <http://news.cornell.edu/stories/2018/07/workshop-trains-plant-scientists-communicate-science>
10. <https://cms.ctahr.hawaii.edu/fcs/About/NewsArticles/getting-engaged>
11. <https://news.ubc.ca/2018/05/07/genetics-help-make-a-weed-a-weed/>
12. <https://qz.com/1227435/one-plant-has-the-ability-to-help-us-understand-climate-change/>
13. <https://www.knowablemagazine.org/article/sustainability/2017/plant-reap-repeat-and-now-rethink>
14. <https://cwroftheus.wordpress.com/2015/10/08/promiscuity-provides-potential-the-sunflower-story/>
15. <https://www.cwrdiversity.org/were-becoming-more-similar-trends-in-global-diet-and-the-consequences-for-food-production-and-health/>
16. Mangan, ME, Fernandez, AL, Van Roekel, RJ, **Kantar, MB**, Kluver III RW, Yost, MA, Ries L. (2010, November). 21st Century Agriculture: Balancing Productivity and Conservation in a Changing Environment. CSA News 16-19

Science Zone Radio Episodes Produced and aired on KTUH

1. York, L. Kantar, M., Radovich, T. (2021, September 15). Dr. Larry York is in The Science Zone on in Your Head with Professor Ted [Radio broadcast]. KTUH. <https://ktuh.org/podcasts>
2. Kantar, M., Radovich, T. (2021, September 22). Dr. Mikey Kantar is in The Science Zone on in Your Head with Professor Ted [Radio broadcast]. KTUH. <https://ktuh.org/podcasts>
3. Jones, T., Kantar, M., Radovich, T. (2021, October 6). Tyler Jones is in The Science Zone on in Your Head with Professor Ted [Radio broadcast]. KTUH. <https://ktuh.org/podcasts>
4. Huffaker, A., Kantar, M., Radovich, T. (2021, October 13). Dr. Alisa Huffaker s in The Science Zone on in Your Head with Professor Ted [Radio broadcast]. KTUH. <https://ktuh.org/podcasts>
5. Dinell, D., Kantar, M., Radovich, T. (2021, October 20). Dan Dinell is in The Science Zone on in Your Head with Professor Ted [Radio broadcast]. KTUH. <https://ktuh.org/podcasts>
6. Neyhart, J., Kantar, M., Radovich, T. (2021, October 27). Dr. Jeff Neyhart is in The Science Zone on in Your Head with Professor Ted [Radio broadcast]. KTUH. <https://ktuh.org/podcasts>
7. Fox, K., Kantar, M., Radovich, T. (2021, November 3). Dr. Kai Fox is in The Science Zone on in Your Head with Professor Ted [Radio broadcast]. KTUH. <https://ktuh.org/podcasts>
8. Eberly, J., Kantar, M., Radovich, T. (2021, November 10). Dr. Jed Eberly is in The Science Zone on in Your Head with Professor Ted [Radio broadcast]. KTUH. <https://ktuh.org/podcasts>
9. Thompson, A., Kantar, M., Radovich, T. (2021, November 17). Dr. Addie Thompson is in The Science Zone on in Your Head with Professor Ted [Radio broadcast]. KTUH. <https://ktuh.org/podcasts>
10. Kosaka, K. Kantar, M., Radovich, T. (2021, November 24). Dr. Kaili Kosaka is in The Science Zone on in Your Head with Professor Ted [Radio broadcast]. KTUH. <https://ktuh.org/podcasts>
11. Ewing, P. Kantar, M., Radovich, T. (2021, December 1). Dr. Patrick Ewing is in The Science Zone on in Your Head with Professor Ted [Radio broadcast]. KTUH. <https://ktuh.org/podcasts>
12. Smith, W., Kantar, M., Radovich, T. (2021, December 8). Dr. Wayne Smith is in The Science Zone on in Your Head with Professor Ted [Radio broadcast]. KTUH. <https://ktuh.org/podcasts>
13. Tugade, B., Mikasobe-Kealiinohomoku, J., Maaz, T., Kantar, M., Radovich, T. (2021, December 15). Bryceson Tugade and Jesse Mikasobe-Kealiinohomoku are in The Science Zone on in Your Head with Professor Ted [Radio broadcast]. KTUH. <https://ktuh.org/podcasts>
14. Lindsay-Juan, G., Maaz, T. Kantar, M., Radovich, T. (2022, January 5). Germaine Lindsay Juan is in The Science Zone on in Your Head with Professor Ted [Radio broadcast]. KTUH. <https://ktuh.org/podcasts>
15. Jabbour, R., Kantar, M., Radovich, T. (2022, January 19). Dr. Randa Jabbour is in The Science Zone on

- in Your Head with Professor Ted [Radio broadcast]. KTUH. <https://ktuh.org/podcasts>
16. Kaufman, A., Kantar, M., Radovich, T. (2022, February 2). Dr. Andy Kaufman is in The Science Zone on in Your Head with Professor Ted [Radio broadcast]. KTUH. <https://ktuh.org/podcasts>
 17. Martinez, N., Kantar, M., Radovich, T. (2022, February 9). Dr. Natalia Martinez is in The Science Zone on in Your Head with Professor Ted [Radio broadcast]. KTUH. <https://ktuh.org/podcasts>
 18. Doyle, S., Kantar, M., Radovich, T. (2022, February 16). Dr. Sarah Doyle is in The Science Zone on in Your Head with Professor Ted [Radio broadcast]. KTUH. <https://ktuh.org/podcasts>
 19. Khoury, C., Kantar, M., Radovich, T. (2022, March 9). Dr. Colin Khoury is in The Science Zone on in Your Head with Professor Ted [Radio broadcast]. KTUH. <https://ktuh.org/podcasts>
 20. Mueller, N., Kantar, M., Radovich, T. (2022, March 9). Dr. Nathan Mueller is in The Science Zone on in Your Head with Professor Ted [Radio broadcast]. KTUH. <https://ktuh.org/podcasts>
 21. Ho-Lastimosa, I., Kantar, M., Radovich, T. (2022, March 23). Ilima Ho-Lastimosa is in The Science Zone on in Your Head with Professor Ted [Radio broadcast]. KTUH. <https://ktuh.org/podcasts>
 22. Uyeda, J., Kantar, M., Radovich, T. (2022, April 6). Dr. Jensen Uyeda, is in The Science Zone on in Your Head with Professor Ted [Radio broadcast]. KTUH. <https://ktuh.org/podcasts>
 23. Lesnik, J., Kantar, M., Radovich, T. (2022, April 13). Dr. Julie Lesnik is in The Science Zone on in Your Head with Professor Ted [Radio broadcast]. KTUH. <https://ktuh.org/podcast>
 24. Wang, D., Kantar, M., Radovich, T. (2022, April 13). Dr. Diane Wang is in The Science Zone on in Your Head with Professor Ted [Radio broadcast]. KTUH. <https://ktuh.org/podcast>
 25. Sachter-Smith, G., Kantar, M., Radovich, T. (2022, April 28). Gabe Sachter-Smith is in The Science Zone on in Your Head with Professor Ted [Radio broadcast]. KTUH. <https://ktuh.org/podcasts>
 26. Rubinoff, D., Kantar, M., Radovich, T. (2022, June 15). Daniel Rubinoff is in The Science Zone on in Your Head with Professor Ted [Radio broadcast]. KTUH. <https://ktuh.org/podcasts>
 27. Campillo, L., Kantar, M., Radovich, T. (2022, July 13). Dr. Luke Campillo is in The Science Zone on in Your Head with Professor Ted [Radio broadcast]. KTUH. <https://ktuh.org/podcasts>
 28. Murphy, K., Kantar, M., Radovich, T. (2022, September 28). Dr. Katie Murphy is in The Science Zone on in Your Head with Professor Ted [Radio broadcast]. KTUH. <https://ktuh.org/podcasts>
 29. Jenkins, D., Kantar, M., Radovich, T. (2022, October 5). Dr. Dan Jenkins is in The Science Zone on in Your Head with Professor Ted [Radio broadcast]. KTUH. <https://ktuh.org/podcasts>
 30. Nguyen, N., Kantar, M., Radovich, T. (2022, October 19). Dr. Nhu Nguyen is in The Science Zone on in Your Head with Professor Ted [Radio broadcast]. KTUH. <https://ktuh.org/podcasts>
 31. Todesco, M., Kantar, M., Radovich, T. (2022, October 26). Dr. Marco Todesco is in The Science Zone on in Your Head with Professor Ted [Radio broadcast]. KTUH. <https://ktuh.org/podcasts>
 32. Zavas, L., Kantar, M., Radovich, T. (2022, October 19). Luka Zavas is in The Science Zone on in Your Head with Professor Ted [Radio broadcast]. KTUH. <https://ktuh.org/podcasts>
 33. Fumia, N., Kantar, M., Radovich, T. (2022, October 19). Nathan Fumia is in The Science Zone on in Your Head with Professor Ted [Radio broadcast]. KTUH. <https://ktuh.org/podcasts>
 34. Frankie, K., Kantar, M., Radovich, T. (2022, November 23). Frankie Koethe in The Science Zone on in Your Head with Professor Ted [Radio broadcast]. KTUH. <https://ktuh.org/podcasts>
 35. Davis, D., Kantar, M., Radovich, T. (2023, January 18). Dylan Davis in The Science Zone on in Your Head with Professor Ted [Radio broadcast]. KTUH. <https://ktuh.org/podcasts>
 36. Flanagan, K., Kantar, M., Radovich, T. (2023, February 10). Kevin Flanagan in The Science Zone on in Your Head with Professor Ted [Radio broadcast]. KTUH. <https://ktuh.org/podcasts>
 37. Riel, B., Kantar, M., Radovich, T. (2023, February 10). Brad Riel in The Science Zone on in Your Head with Professor Ted [Radio broadcast]. KTUH. <https://ktuh.org/podcasts>
 38. Hershberger, J., Kantar, M., Radovich, T. (2023, February 17). Jenna Hershberger in The Science Zone on in Your Head with Professor Ted [Radio broadcast]. KTUH. <https://ktuh.org/podcasts>
 39. Rife, T., Kantar, M., Radovich, T. (2023, February 17). Trevor Rife in The Science Zone on in Your Head with Professor Ted [Radio broadcast]. KTUH. <https://ktuh.org/podcasts>
 40. Lachowicz, J., Kantar, M., Radovich, T. (2023, February 15). Jennifer Lachowicz in The Science Zone on in Your Head with Professor Ted [Radio broadcast]. KTUH. <https://ktuh.org/podcasts>
 41. Tuttle, L., Kantar, M., Radovich, T. (2023, March 31). Lillian Tuttle is in The Science Zone on in Your Head with Professor Ted [Radio broadcast]. KTUH. <https://ktuh.org/podcasts>
 42. Burden, J., Kantar, M., Radovich, T. (2023, November 24). Juli Burden is in The Science Zone on in Your Head with Professor Ted [Radio broadcast]. KTUH. <https://ktuh.org/podcasts>

43. Jamshidi, S, Kantar, M., Radovich, T. (2024, February 23). Sajad Jamshidi is in The Science Zone on in Your Head with Professor Ted [Radio broadcast]. KTUH. <https://ktuh.org/podcasts>
44. Ting, TC, Schafer, S, Kantar, M., Radovich, T. (2024, February 23). To-Chia Ting and Sam Schafer are in The Science Zone on in Your Head with Professor Ted [Radio broadcast]. KTUH. <https://ktuh.org/podcasts>
45. Wright, M, Kantar, M., Radovich, T. (2024, September 13). Mark Wright is in The Science Zone on in Your Head with Professor Ted [Radio broadcast]. KTUH. <https://ktuh.org/podcasts>
46. Shelly, E, Kantar, M., Radovich, T. (2024, September 20). Emma Shelly is in The Science Zone on in Your Head with Professor Ted [Radio broadcast]. KTUH. <https://ktuh.org/podcasts>
47. Runck, B, Kantar, M., Radovich, T. (2024, October 11). Bryan Runck is in The Science Zone on in Your Head with Professor Ted [Radio broadcast]. KTUH. <https://ktuh.org/podcasts>
48. Manshardt, R, Kantar, M., Radovich, T. (2024, December 6). Richard Manshardt is in The Science Zone on in Your Head with Professor Ted [Radio broadcast]. KTUH. <https://ktuh.org/podcasts>
49. Austin, K., Rubinoff, D. Kantar, M., Radovich, T. (2025, January 31). Kyle Austin and Dan Rubinoff is in The Science Zone on in Your Head with Professor Ted [Radio broadcast]. KTUH. <https://ktuh.org/podcasts>
50. Evans, K., Kantar, M., Radovich, T. (2025, February 28). Kate Evans is in The Science Zone on in Your Head with Professor Ted [Radio broadcast]. KTUH. <https://ktuh.org/podcasts>

Articles about lab work

https://pacifichorticulture.org/podcast/episode-xxxi-stalking-the-crop-wild-relatives-with-colin-khoury-and-michael-kantar/?utm_source=mailpoet&utm_medium=email&utm_campaign=stalking-the-wild-crop-relatives-mbrs

<https://thefoodsection.substack.com/p/86a13c04-f2a0-4bfl-a20e-a30eabf793aa>

<https://theconversation.com/computer-science-can-help-farmers-explore-alternative-crops-and-sustainable-farming-methods-203108>

www.eurekalert.org/news-releases/947978

<https://www.natureindex.com/news-blog/how-altmetrics-level-playing-field-women-stem-research-bias>

<https://phys.org/news/2020-06-sustainable-cover-crop-farming-big-limitation.html>

<https://www.aaas.org/news/making-engagement-easier-others-matching-scientists-artists-and-students>

<https://www.aaas.org/programs/center-public-engagement-science-and-technology/reflections/power-infographics-pairing>

<https://sustainable-secure-food-blog.com/2018/09/21/yams-a-main-staple-in-africa-asia/>

www.aaas.org/news/public-engagement-helps-scientists-tackle-global-challenges

cms.ctahr.hawaii.edu/NewsLetter/surfs-up-in-montreal

news.cornell.edu/stories/2018/07/workshop-trains-plant-scientists-communicate-science

cms.ctahr.hawaii.edu/fcs/About/NewsArticles/getting-engaged

news.ubc.ca/2018/05/07/genetics-help-make-a-weed-a-weed/

qz.com/1227435/one-plant-has-the-ability-to-help-us-understand-climate-change/

www.knowablemagazine.org/article/sustainability/2017/plant-reap-repeat-and-now-rethink

<https://myemail.constantcontact.com/News-from-the-Sustainable-and-Organic-Program---CTAHR.html?soid=1102675671876&aid=cF291tT5bSY>

<https://cwroftheus.wordpress.com/2015/10/08/promiscuity-provides-potential-the-sunflower-story/>

<https://www.cwrdiversity.org/were-becoming-more-similar-trends-in-global-diet-and-the-consequences-for-food-production-and-health/>

Videos about lab work

seedworld.com/michael-kantar-on-how-netflix-is-changing-plant-breeding/

<https://youtu.be/XmA9Xis>

https://www.youtube.com/watch?v=eHBwu_QpDTk&feature=youtu.be

<https://www.aaas.org/news/public-engagement-helps-scientists-tackle-global-challenges>

<http://seedworld.com/michael-kantar-u-hi-evolving-plant-breeding-methods-striving-contribute-food-security/>

www.forevergreen.umn.edu/files/scie-300-so-podcast-michael-kantar-sunflower-perenniality-agriculture

<https://www.youtube.com/watch?v=5QNYOcXPeFo>

Leadership Roles

Chair of NAPB conference planning committee 2025
Chair National Plant Breeding Coordinating Committee (PBCC) 2019-2020
Vice-chair National Plant Breeding Coordinating Committee (PBCC) 2018-2019
Secretary National Plant Breeding Coordinating Committee (PBCC) 2017-2018
Communications officer National Plant Breeding Coordinating Committee (PBCC) 2016-2017
Grant reviewer for the National Institute of Food and Agriculture (NIFA) Agriculture and Food Research Initiative (AFRI)
National Association of Plant Breeders Graduate Student Poster Competition judge in 2016
Member the National Plant Breeding Coordinating Committee (PBCC)
Reviewer for Molecular Ecology, Reviewer for Crop Science, Reviewer for Frontiers in Plant Science, Reviewer for Nature Ecology and Evolution, Reviewer Evolutionary Applications, Reviewer for Ecology and Evolution, Reviewer for Scientific Reports, Reviewer for Agronomy Journal, Reviewer for PLOS, Reviewer for Nature Climate Change, Reviewer for Proceedings of the Royal Society B, Reviewer for Genes/Genomes/Genetics, Reviewer for Genetics, Reviewer for Briefings in Functional Genomics, Reviewer for Biology

Graduate Students

<u>Category</u>	<u>Current Number of Students</u>	<u>Number Graduated (Career)</u>
<i>Chair of Master's Committees</i>	0	7
<i>Chair of PhD Committees</i>	1	3
<i>Member of Master's Committees</i>	2	7
<i>Member of PhD Committees</i>	10	11

Grant Support

Title of Grant: *Variety Showcase for the NAPB national meeting in 202*
Source of Grant: *Honolulu County*
Total Dollar Value: \$36000
Dates of Grant: 2024
Role: PI

Title of Grant: *Understanding Germplasm transitions to safeguard the future of plant breeding*
Source of Grant: *USDA-AFRI PHPPP*
Total Dollar Value: \$15000
Dates of Grant: 2024
Role: PI

Title of Grant: *NSF Engines Development Award: Advancing climate resilient food innovations*
Source of Grant: NSF
Total Dollar Value: \$1,000,382
Dates of Grant: 2023
Role: CoPI

Title of Grant: *Soil health fingerprinting: Rapidly predicting soil health in a diversity of soils using machine*
Source of Grant: *USDA-AFRI: DSFAS*
Total Dollar Value: \$649,571
Dates of Grant: 2023
Role: CoPI

Title of Grant: *CleanSEED: A project to ensure the sustainability of U.S. sweetpotato seed programs*
Source of Grant: USDA SCRI

Total Dollar Value: \$5,010,000; (355,940.59 to Hawaii)

Dates of Grant: 2022

Role: CoPI

Title of Grant: Understanding emergent agricultural phenomena through Big Data Analytics: creating frameworks for understanding using Physics-guided Machine Learning and agent-based models,

Source of Grant: USDA- AG2PI Seed Grant

Total Dollar Value: \$49,700

Dates of Grant: 2022

Role: PI

Title of Grant: *Continuation of Breeding Program for Stevia*

Source of Grant: Sweet Green Fields LLC,

Total Dollar Value: \$665,000 (\$335,000)

Dates of Grant: 2021

Role: CoPI

Title of Grant: *Genetic controls and mechanisms for the recruitment of crop microbiomes for enhanced ecosystem adaptation*

Source of Grant: *USDA*

Total Dollar Value: \$748,330

Dates of Grant: 2020

Role: CoPI

Title of Grant: *Transboundary Air Pollution and the Socio-Ecological Impact of China's Belt-Road Initiative in the Mekong Sub-Region*

Source of Grant: LUCE Initiative on Southeast Asia Fellowship (LuceSEA),

Total Dollar Value: \$99,790

Dates of Grant: 2020

Role: CoPI

Title of Grant: *Ho 'ākamai! Building Expertise In Fact Using Active Learning (BE-FACTUAL)*

Source of Grant: *USDA*

Total Dollar Value: \$491,851.88

Dates of Grant: 2019

Role: CoPI

Title of Grant: *Computational Agroecology*

Source of Grant: *Schmidt Family Foundation*

Total Dollar Value: \$300,000 (\$150,000)

Dates of Grant: 2019

Role: CoPI

Title of Grant: *Development of a new perennial grain crop*

Source of Grant: *Bard Senior research fellowship, BARD*

Total Dollar Value: \$8000

Dates of Grant: 2019

Role: PI

Title of Grant: *Establishment of Breeding Program for Stevia*

Source of Grant: Sweet Green Fields LLC,

Total Dollar Value: \$538,500 (\$238,000)

Dates of Grant: 2019

Role: CoPI

Title of Grant: *The power of infographics*
Source of Grant: Leichtag Foundation
Total Dollar Value: \$10000
Dates of Grant: 2019
Role: PI

Title of Grant: *Genetic structure and mechanisms of drought adaptation in Capsicum*
Source of Grant: USDA
Total Dollar Value: \$475,000 (\$31000)
Dates of Grant: 2017
Role: CoPI

Title of Grant: *Toward breeding of Silphium Integrifolium*
Source of Grant: The Land Institute
Total Dollar Value: \$200,084.70
Dates of Grant: 2015
Role: CoPI

Title of Grant: *Utilizing Population Genomics to speed the domestication of Silphium Integrifolium*
Source of Grant: The Land Institute
Total Dollar Value: \$201,816
Dates of Grant: 2015
Role: CoPI

Title of Grant: *Development of perennial sunflower for food production and wildlife services*
Source of Grant: Forever Green Initiative: Minnesota variety development fund
Total Dollar Value: \$201,816
Dates of Grant: 2015
Role: CoPI

Presentations at Conferences

Title: *A New R-Package to Quantify the Home-Field Advantage of Modern Plant Breeding*
Authors: Michael Kantar,
Name of Conference: ASA-CSSA-SSA
Location: San Antonio, TX
Date of Presentation: 2024

Title: *Understanding Plant Germplasm collections: Data, Sharing, and breeding for Climate Change*
Authors: Michael Kantar,
Name of Conference: EUCARPIA
Location: Leipzig, Germany
Date of Presentation: 2024

Title: *Using environmental genomic selection to breed for Climate Resiliency*
Authors: Michael Kantar,
Name of Conference: Purdue Agronomy Department
Location: St. Paul Minnesota
Date of Presentation: 2024

Title: *Understanding the role of Altimetrics in Gender Bias in Scientific*
Authors: Michael Kantar,
Name of Conference: Purdue Agronomy Department
Location: West Lafayette Indiana
Date of Presentation: 2024

Title: *Exploring and Using Germplasm Collections for Climate Resiliency*

Authors: Michael Kantar,

Name of Conference: *School of Life Science Seminar*

Location: Manoa

Date of Presentation: 2024

Title: *Exploring and Using Germplasm Collections for Climate Resiliency*

Authors: Michael Kantar,

Name of Conference: *Plant and Animal Genome*

Location: San Diego, California

Date of Presentation: 2024

Title: *Helianthus Tuberosus: Diversity, Invasiveness and Potential As a Donor of Perenniality*

Authors: Michael Kantar,

Name of Conference: *Plant and Animal Genome*

Location: San Diego, California

Date of Presentation: 2023

Title: *Agroecological Transition Functions*

Authors: Michael Kantar, Adam Streed, Barath Raghavan, Patrick Ewing*, Bryan Runck Diane Wang

Name of Conference: *ASA-CSSA-SSA International Annual Meeting*

Location: *San Antonio, Texas*

Date of Presentation: 2019

Title: *The home field advantage of modern plant breeding,*

Authors: Patrick Ewing*, Bryan Runck Thomas Kono, Michael Kantar

Name of Conference: *ASA-CSSA-SSA International Annual Meeting*

Location: *San Antonio, Texas*

Date of Presentation: 2019

Title: *Spatial Efficiency of Plant Breeding*

Authors: Michael Kantar*, Bryan Runck, Barath Raghavan

Name of Conference: *Sustainability*

Location: *Vancouver, British Columbia*

Date of Presentation: 2019

Title: Plant Breeding Coordinating Committee survey of US Public Plant Breeding Capacity

Authors: Sarah Kostick*, Ksenjia Gasic, Kate Evans, Michael Kantar

Name of Conference: ASHS Annual Conference

Location: *Las Vegas, NV*

Date of Presentation: 2019

Title: Plant Breeding Coordinating Committee survey of US Public Plant Breeding Capacity

Authors: Todd Anderson*, Ted Radovich, JP Bingham, Michael Kantar

Name of Conference: ASHS Annual Conference

Location: *Las Vegas, NV*

Date of Presentation: 2019

Title: Conservation and Use of the North American Plant Cornucopia: The Way Forward

Authors: Colin Khoury*, Michael Kantar, Stephanie Green, Kate Williams, Laura Marek

Name of Conference: ASA-CSSA-SSA International Annual Meeting

Location: *Baltimore, MD*

Date of Presentation: 2018

Title: Environmental Association Analysis of Diverse Chile Peppers (*Capsicum* spp.) for Abiotic Stress Tolerance
Authors: Vivian Bernau*, Kristin Mercer, Leah McHale Michael Kantar
Name of Conference: ASA-CSSA-SSA International Annual Meeting
Location: *Baltimore, MD*
Date of Presentation: 2018

Title: Environmental Association Analysis of Diverse Chile Peppers (*Capsicum* spp.) for Abiotic Stress Tolerance
Authors: Juan Viruel*, Marybel Soto Gomez, Sean Graham, Michael Kantar
Name of Conference: 6th Monocots Congress
Location: *Natal, Brazil*
Date of Presentation: 2018

Title: U.S. Public Plant Breeding Capacity
Authors: Ksenjia Gasic, Kate Evans, Michael Kantar*
Name of Conference: National Association of Plant Breeders
Location: *Guelph, Canada*
Date of Presentation: 2018

Title: Sustaining the Future of U.S. Plant Breeding
Authors: Ksenjia Gasic, Kate Evans, Michael Kantar*
Name of Conference: National Association of Plant Breeders
Location: *Guelph, Canada*
Date of Presentation: 2018

Title: *Phylogenomics of the Dioscorea Yams, a Major Pantropical Crop*
Authors: Marybel Soto Gomez*, Juan Viruel, Sean Graham, Michael Kantar
Name of Conference: Botany
Location: *Rochester, MN*
Date of Presentation: 2018

Title: Genetic Diversity of `Uala (Sweet Potato) in Hawai`i
Authors: Elizabeth Winnicki*, Ted Radovich, Aurora Kagawa-Viviani, Michael Kantar
Name of Conference: ASPB
Location: Montreal, Quebec, Canada
Date of Presentation: 2018

Title: *Evolution of Invasiveness by Genetic Accommodation in a Perennial Sunflower*
Authors: Dan Bock*, Michael Kantar, Loren Rieseberg
Name of Conference: Plant and Animal Genome XXVI
Location: Montreal, San Diego, CA
Date of Presentation: 2018

Title: *Phylogenomics of the Dioscorea Yams, a Major Pantropical Crop*
Authors: Marybel Soto Gomez*, Juan Viruel, Sean Graham, Michael Kantar
Name of Conference: Plant and Animal Genome XXVI
Location: *San Diego, CA*
Date of Presentation: 2018

Title: *Sustaining the Future of Plant Breeding*
Authors: Ksenjia Gasic, Kate Evans, Michael Kantar*
Name of Conference: ASA-CSSA-SSA International Annual Meeting
Location: *Tampa, FL*
Date of Presentation: 2017

Title: Genetic Improvement of Taro for taro leaf blight resistance in Hawai'i
Authors: Roshan Paudel*, Michael Kantar, Susan Miyasaka, Mike Shintaku
Name of Conference: ASHS Annual Conference
Location: *Waikola Hawaii*
Date of Presentation: 2017

Title: Exploring the Genetic Diversity of Hawaiian Sweet Potato
Authors: Renee Bellinger*, Roshan Paudel, Michael Kantar, Susan Miyasaka, Mike Shintaku
Name of Conference: ASHS Annual Conference
Location: *Waikola Hawaii*
Date of Presentation: 2017

Title: Improvement of Fruit Quality & Insect Tolerance in Pumpkin Varieties for Hawaiian Markets
Authors: Alex Campbell*, Ted Radovich, Michael Kantar
Name of Conference: ASHS Annual Conference
Location: *Waikola Hawaii*
Date of Presentation: 2017

Title: Sustaining the Future of U.S. Plant Breeding
Authors: Ksenjia Gasic, Kate Evans, Michael Kantar*
Name of Conference: National Association of Plant Breeders
Location: *Davis, CA*
Date of Presentation: 2017

Title: *Controlled Crossing within Acacia koa A. Gray*
Authors: Del Valle-Echevarria*, Michael Kantar, Susan Miyasaka
Name of Conference: ASPB
Location: *Honolulu, HI*
Date of Presentation: 2017

Title: Sustaining the Future of U.S. Plant Breeding
Authors: Ksenjia Gasic, Kate Evans, Michael Kantar*
Name of Conference: ASPB
Location: *Honolulu, HI*
Date of Presentation: 2017

Title: *Revisiting a wild perennial sunflower hybrid swarm*
Authors: Adam Herman*, Michael Kantar, Yaniv Brandvain
Name of Conference: ASPB
Location: *Portland Oregon*
Date of Presentation: 2017

Title: *Exploring local adaptation in crop wild relatives*
Authors: Michael Kantar*, Roshan Paudal, Susan Miyasaka, Michael Shintaku
Name of Conference: *Sustainability*
Location: *Davis, California*
Date of Presentation: 2017

Title: Vitamin Variation In Capsicum Spp. Provides Opportunities To Improve Nutritional Value Of Human Diets
Authors: Justin Anderson*, Michael Kantar, Kristin Mercer, David Baumler
Name of Conference: ASA-CSSA-SSA International Annual Meeting
Location: *Phoenix, AZ*
Date of Presentation: 2016

Title: Use of pseudo-reference genomes to improve genotyping-by-sequencing of taro (*Colocasia esculenta*)
Authors: Susan Miyasaka*, Mike Shintaku, Michael Kantar
Name of Conference: ASHS Annual Conference
Location: *Atlanta, GA*
Date of Presentation: 2016

Title: Environmental association analyses identify candidates for abiotic stress tolerance in Glycine soja, the wild progenitor of cultivated soybeans
Authors: Justin Anderson*, Tom Kono, Robert Stupar, Peter Morrell, Michael Kantar
Name of Conference: Plant and Animal Genome XXIV
Location: *San Diego, CA*
Date of Presentation: 2016

Title: Environmental association analyses identify candidates for abiotic stress tolerance in Glycine soja, the wild progenitor of cultivated soybeans
Authors: Justin Anderson*, Tom Kono, Robert Stupar, Peter Morrell, Michael Kantar
Name of Conference: ASA-CSSA-SSA International Annual Meeting
Location: *Phoenix, AZ*
Date of Presentation: 2016

Title: *The Search for Functional Structural Variants and Adaptive Traits in Soybean*
Authors: Justin Anderson*, Tom Kono, Robert Stupar, Michael Kantar
Name of Conference: ASA-CSSA-SSA International Annual Meeting
Location: *San Diego, CA*
Date of Presentation: 2016

Title: Leveraging interdisciplinary collaborations to develop new crops and re-imagine traditional ones
Authors: Michael Kantar*, Colin Khoury, Robert Stupar, Donald Wyse
Name of Conference: ASA-CSSA-SSA International Annual Meeting
Location: *Minneapolis, MN*
Date of Presentation: 2015