

Additional Project Outputs for OREI 2018-51300-28430 *Northern Vegetable Improvement Collaborative (NOVIC) 3*

Named NOVIC cultivars, available commercially or through NOVIC's PPB **networks** include:

- *Snap pea*: Cardinal, Ringo, Beauregarde⁵, Epistro, Zap, Greenwave, Sweet Gem¹, OSU 1430.
- *Snow pea*: OSU 1431.
- *Winter squash*: Honeynut^{1,2}, Gouda, Robin's Koginut⁵, 661, 898/Honeypatch⁵, Brulee¹, Lodi⁵,
- *Tromboncino type summer squash* Centercut⁵
- *Variiegated snacking peppers*: Patchwork^{6b}, Tapestry, Collage, Circus
- *Low-pungency habanero peppers*: Notta Hotta, Mild Thing
- *Broccoli*: Solstice^{2,7}, Myers Best³
- *Tomato*: Midnight Roma Indigo^{4,5}
- *Sweet Corn*: Who Gets Kissed^{1,7}, Honey Badger⁷, Quick Kiss, Olympic Sweet

¹ High Mowing Seeds <https://www.highmowingseeds.com>.

² Fedco Seeds <https://fedcoseeds.com/>.

³ Turtle Tree Seeds <https://turtletreeseed.org/>.

⁴ Tomato King <https://tomato-king.com/>

⁵ Row 7 Seed Company <https://www.row7seeds.com/>.

⁶ Southern Exposure Seed Exchange <https://www.southernexposure.com/>.

⁷ Nature & Nurture Seeds <https://natureandnurtureseeds.com/>.

Journal articles: farmer-participatory plant breeding

- Colley, M.R., Tracy, W.F., Lammerts van Bueren, E.T., Diffley, M. and Almekinders, C.J., 2022. *How the Seed of Participatory Plant Breeding Found Its Way in the World through Adaptive Management*. Sustainability, 14(4), p.2132. <https://doi.org/10.3390/su14042132>. Open access.
- Colley, M.C., J.C. Dawson, C. McCluskey, J.R. Myers, W.F. Tracy and E.T. Lammerts van Bueren. 2021. *Exploring the emergence of participatory plant breeding in countries of the global North a review*. Journal of Agricultural Science. First View , pp. 1 19. DOI: <https://doi.org/10.1017/S0021859621000782>. Open access.
- McCluskey, C. & Tracy, W.F. (2021). *Engaging Farmer Stakeholders: Maize Producers Perceptions and Strategies for Managing On-Farm Genetic Diversity in the Upper Midwest*. Sustainability, 13: 8843, <https://www.mdpi.com/2071-1050/13/16/8843/htm>. Open access.

Journal articles: plant genetic resources and breeding: cucurbits

- Grumet, Rebecca, James D. McCreight, Cecilia McGregor, Yiqun Weng, Michael Mazourek, Kathleen Reitsma, Joanne Labate, Angela Davis, and Zhangjun Fei. *Genetic resources and vulnerabilities of major cucurbit crops*. Genes 12.8 (2021): 1222. <https://doi.org/10.3390/genes12081222>. Open access.

- Colin K. Houry, Daniel Carver, Heather R. Kates, Harold A. Achicanoy, Maarten van Zonneveld, Evert Thomas, Claire Heinitz, Robert Jarret, Joanne A. Labate, Kathy Reitsma, Gary P. Nabhan, Stephanie L. Greene. 2020. *Distributions, conservation status, and abiotic stress tolerance potential of wild cucurbits (Cucurbita L.)*. *Plants, People, Planet* 2.3 (2020): 269-283. <https://doi.org/10.1002/ppp3.10085>. *Open access*.

Journal articles: plant genetic resources and breeding: sweet corn

- Revilla, P., Anibas, C.M. & Tracy, W.F. (2021). *Sweet Corn research around the world 2015-2020*. *Agronomy* 11(34). <https://doi.org/10.3390/agronomy11030534>.
- Baseggio, M., Murray, M., Wu, D., Ziegler, K.N., Chamness, J., Buckler, E.S., Hamilton, J.P., Buell, C.R., Vatamaniuk, O.K., Buckler, E.S., Smith, M.E., Baxter, I., Tracy, W.F., & Gore, M.A. (2021). *A genome-wide association study reveals an independent genetic basis of zinc and cadmium concentrations in fresh sweet corn kernels*. *Genes, Genomes, and Genetics* 2021-402240. <https://doi.org/10.1093/g3journal/jkab186>. *Open access*.
- Hislop, L., Stephanie, E., Flannery, P.J., Baseggio, M., Gore, M.A, & Tracy, W.F. (2021). *Sugarcane Mosaic Virus Resistance in the Wisconsin Sweet Corn Diversity Panel*. *Journal of American Society for Horticultural Science*. *J. Amer. Soc. Hort. Sci.* 146(6):435444. DOI [10.21273/JASHS05097-21](https://doi.org/10.21273/JASHS05097-21). *Open access*.
- Moore, Virginia M. and Tracy, William F. 2020. *Combining ability of husk extension, maysin content, and corn earworm resistance*. *Journal of American Society of Horticultural Science*. <https://doi.org/10.21273/JASHS04974-20>. *Open access*.

Journal articles: plant genetic resources and breeding: crucifers

- Makenzie E Mabry, Sarah D Turner-Hissong, Evan Y Gallagher, Alex C McAlvay, Hong An, Patrick P Edger, Jonathan D Moore, David A C Pink, Graham R Teakle, Chris J Stevens, Guy Barker, Joanne Labate, Dorian Q Fuller, Robin G Allaby, Timothy Beissinger, Jared E Decker, Michael A Gore, J Chris Pires. 2021 *The evolutionary history of wild, domesticated, and feral Brassica oleracea (Brassicaceae)*. *Molecular biology and evolution* 38.10 (2021): 4419-4434. <https://doi.org/10.1093/molbev/msab183>. *Open access*.

Journal articles: plant genetic resources and breeding: tomato

- Li, Jian, et al. *Novel Sources of Resistance to Fusarium oxysporum f. sp. lycopersici Race 3 Among Solanum pennellii Accessions*. *Journal of the American Society for Horticultural Science* 147.1 (2022): 35-44. DOI: [10.21273/JASHS05080-21](https://doi.org/10.21273/JASHS05080-21). *Open access*.
- Labate, Joanne A. *DNA Variation in a Diversity Panel of Tomato Genetic Resources*. *Journal of the American Society for Horticultural Science* 146.5 (2021): 339-345. DOI: [10.21273/JASHS05066-21](https://doi.org/10.21273/JASHS05066-21). *Open access*.

Journal articles: NOP-compliant breeding techniques:

- Labate, Joanne A., Jeffrey C. Glaubitz, and Michael J. Havey. *Genotyping by sequencing for SNP marker development in onion*. *Genome* 63.12 (2020): 607-613. <https://doi.org/10.1139/gen-2020-0011>. *Paywall*.
- Zystro, Jared, Tessa Peters, Kathleen Miller, and William F. Tracy 2021. *Classical and genomic prediction of synthetic open pollinated sweet corn performance in organic environments*. *Crop Science* <https://doi.org/10.1002/csc2.20531>. *Open access*.

- Zystro, Jared, Tessa Peters, Kathleen Miller, and William F. Tracy 2021. *Inbred and hybrid sweetcorn genotype performance in diverse organic environments*. Crop Science <https://doi.org/10.1002/csc2.20457>. Open access.
- Park, H.E., R.M. King, and J.R. Myers. 2022. A case for breeding organic snap beans in an organic selection environment. Annu. Rept. Bean Improv. Coop. 65:31-32. https://www.bic.uprm.edu/wp-content/uploads/2022/12/BIC-vol.-65_2022.pdf. Open access.
- Mason, T.J., Bettenhausen, H.M., Chaparro, J.M. et al. Evaluation of ambient mass spectrometry tools for assessing inherent postharvest pepper quality. Horticulture Res 8, 160 (2021). <https://academic.oup.com/hr/article/doi/10.1038/s41438-021-00596-x/6446746>.

Journal articles: plant breeding and rhizosphere microbiome

- Park, H.E., L. Nebert, R. King, P. Busby and J. Myers. 2023. *Influence of organic plant breeding on the rhizosphere microbiome of common bean (Phaseolus vulgaris L.)*. Frontiers in Plant Science. <https://doi.org/10.3389/fpls.2023.1251919>. Open access.

Journal articles – other:

- Yactayo-Chang, J.P., Boehlein, S., Beiriger, R.L., Resende M.F.R., Jr., Bruton, R.G., Alborn, H.T., Romero, M., Tracy, W.F, & Block. A.K. (2022). The Impact of Post-Harvest Storage on Sweet Corn Aroma. Phytochemistry Letters 52:3339. <https://doi.org/10.1016/j.phytol.2022.09.001>. Paywall.

Theses and Dissertations

- Hayley Park, 2022. Evaluation and breeding for improved performance of *Phaseolus vulgaris* in organic systems M.S. Oregon State University. June 2022. https://ir.library.oregonstate.edu/concern/graduate_thesis_or_dissertations/vq27zw72x?locale=en.