

**Publications by NC State University Cooperative Tree Improvement Program
Scientists, Students, & Associates**

Compiled from Cooperative Annual Reports (1957-2024)

2024

Goda, K. and F. Isik. 2024. Optimal mating of *Pinus taeda* L. under different scenarios using differential evolution algorithm. For. Sci. (in press, available online at: <https://doi-org.prox.lib.ncsu.edu/10.1093/forsci/fxad052>).

Walker, T.D., J.A. Maynor, F. Isik, A.J. Heine, R. Whetten, K.G. Payne, T.A. Quate, and S.E. McKeand. 2024. Stem defect rates and ice storm damage for families of *Pinus taeda* from Coastal and Piedmont provenances planted on a North Carolina Piedmont site. For. Sci. (in press, available online at: <https://doi.org/10.1093/forsci/fxae016>).

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Lin, Y-M., M.N. Shalizi, T.D. Walker, E. Lauer, C.D. Carrasco, K.R. Gujjula, H. Suren, and F. Isik. 2023. Low-density AgriSeq targeted genotyping-by-sequencing markers are efficient for pedigree quality control in *Pinus Taeda* L. breeding. Tree Genetics & Genomes. 19:34, <https://link.springer.com/article/10.1007/s11295-023-01608-8>.

Shalizi, M.N., T.D. Walker, A.J. Heine, K.G. Payn, F. Isik, B.P. Bullock, and S.E. McKeand. 2023. Performance based on measurements from individual-tree progeny tests strongly predicts early stand yield in loblolly pine. For. Sci. 69(3):299-310. <https://doi.org/10.1093/forsci/fxad002>).

Walker, T.D. and F. Isik. 2023. Managing cold hardiness in a tree breeding program while balancing gain and diversity. P.13-22 in: Merkle, S.A. and E.M. Levi. (eds.). 2023. Proc. 37th South. For. Tree Impr. Conf., Knoxville, TN. <http://www.sftic.org>. 98 p.

Whetten, R.W., K.J.S. Jayawickrama, W.P. Cumbie, and G.S. Martins. 2023. Genomic tools in applied tree breeding programs: factors to consider. Forests 14(2):169, <https://doi.org/10.3390/f14020169>.

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