One hundred years of comparative genetic and physical mapping in cultivated oat (*Avena sativa*)

Charlene P. Wight, Victoria C. Blake, Eric N. Jellen, Eric Yao, Taner Z. Sen, and Nicholas A. Tinker

Crop & Pasture Science (2024) **75:** CP23246 https://doi.org/10.1071/CP23246

Contact: Charlene Wight, charlene.wight@agr.gc.ca

Summary:

Researchers studying cultivated oat (*Avena sativa* L.) have been accumulating information concerning the locations of major and minor genes for traits of economic importance for more than 100 years. In this work, an inventory of previously identified genes and quantitative trait loci (QTL) was created. Most of these genes and QTL could be positioned on the OT3098 v2 physical sequence through comparative mapping.

The full inventory (Supplementary file 8) and related resources can be found *via* the journal article (link above) or through the following links:

- OT3098 v2 genome browser tracks on GrainGenes (tracks 'Oat-2018-Consensus...' and 'QTL/gene inventory...' from the list on the left hand side): https://wheat.pw.usda.gov/jb/?data=%2Fggds%2Foat-ot3098v2-pepsico
- Supplementary file 1: Linkage group (LG) correspondence table (.xlsx file)
- Supplementary file 2: 2018 Mrg map LG regions vs. OT3098v2 tables (.xlsx file)
- Supplementary file 3: <u>2018 Mrg map LG regions vs. OT3098v2 track information</u> (.gff file)
- Supplementary file 4: 2018 Mrg map LG regions in order vs. OT3098v2 (.pdf file)
- Supplementary file 5: 2018 Mrg map LG regions vs. OT3098v2 (.pdf file)
- Supplementary file 6: OT3098v2 vs. 2018 Mrg map LG, part 1 (.pdf file)
- Supplementary file 7: OT3098v2 vs. 2018 Mrg map LG, part 2 (.pdf file)
- Supplementary file 8: The hexaploid oat gene and QTL inventory tables (.xlsx file)
- Supplementary file 9: <u>The hexaploid oat gene and QTL inventory track information</u> (.gff file)