Data and Knowledge Management for the Oat Community

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This short presentation will highlight projects that interconnect our oat community and our data. These efforts result from active partnerships among GrainGenes (wheat.pw.usda.gov), T3/Oat (triticeaetoolbox.org/oat/), and Agriculture and Agri-Food Canada (AAFC). GrainGenes is the primary repository of published, peer-reviewed data. As a relational database, it allows users to exploit links between different data types. For example, a QTL from one experiment can be cross-validated with other experiments to derive further evidence related to map position, causal genes, or germplasm source. GrainGenes and AAFC are collaborating to incorporate additional results from new and historical experiments into this database. The T3/Oat database specializes in providing public access to raw genotype and phenotype data that can be used to build or support new hypotheses. It hosts data from oat breeders and from public oat variety trials. T3/Oat is collaborating with AAFC to link germplasm records in T3/Oat to pedigree records in POOL (triticeaetoolbox.org/POOL/). We also wish to highlight the active role that the Oat Newsletter (oatnews.org) has played in the oat community, especially since it was redesigned as a dynamic community news hub following the last AOWC meeting in 2014. The Oat Newsletter has an email list which is used periodically to alert the community to new items of interest. Additionally, we have now reestablished a community-accessible email list called "OatMail", which provides subscribers with a direct communication channel to each other. Subscription information for both lists is available on the Oat Newsletter site.