

USDA-ARS, WESTERN WHEAT QUALITY LABORATORY**E-202 Food Science & Human Nutrition Facility East, P.O. Box 646394, Washington State University, Pullman, WA 99164-6394, USA.**<http://www.wsu.edu/~wwql/php/index.php>

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The mission of the Western Wheat Quality Laboratory is two-fold: conduct milling, baking, and end-use quality evaluations on wheat breeding lines and conduct research on wheat grain quality and utilization. Our web site <http://www.wsu.edu/~wwql/php/index.php> provides great access to our research, including a database of wheat cultivars relating kernel hardness and puroindoline alleles. Our research publications are available on our web site.

We are serving as curator of the grain hardness, puroindoline, and *GSP-1* gene sections of the Catalogue of Gene Symbols in Wheat. Several new alleles have been documented in *Ae. tauschii*, synthetic hexaploids from CIM-MYT, and other diploid taxa. Morris and Engle lead the Pacific Northwest Wheat Quality Council, a consortium of collaborators who evaluate the quality of new cultivars and advanced breeding lines. Our current activities and projects include grain hardness and puroindolines, waxy wheat, polyphenol oxidase (PPO), arabinoxylans, SDS sedimentation test, and soft durums. Beecher and Luna currently are researching the genetic basis for noodle dough color stability. Bettge currently is researching the influence of oxidative gelation on flour end-use functionality. As such, he is developing a laboratory-scale method for pancake-making in order to provide an end-use test for flour functionality in batter systems.

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