



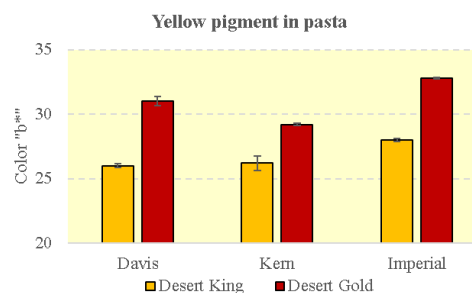
Durum wheat variety 'UC-Desert Gold'

Development: **UC-Desert Gold** is a durum wheat variety developed by the introgression of two genes for improved yellow pigment and one gene for reduced grain cadmium content in the UC Davis wheat variety Desert King. This variety was developed by the University of California wheat-breeding program and was tested in Regional Yield trials as experimental line UC1850.

Characteristics: **UC-Desert Gold** is very similar in yield, heading time and plant height to the successful variety Desert King. **UC-Desert Gold** has significantly better pasta color, gluten strength and reduced cadmium content in the grain (a beneficial health trait) than Desert King.

Disease resistance: **UC-Desert Gold** shows good resistant to stripe rust, barley yellow dwarf virus (BYDV) and septoria tritici blot.

Quality: **UC-Desert Gold** represents an improvement in pasta quality relative to Desert King. It has better semolina and pasta color (see figure) and higher gluten strength. **UC-Desert Gold** received excellent quality evaluations by the milling industry at the California Wheat Quality Collaborator Program in 2017



Nutritional characteristics: **UC-Desert Gold** carries the *Cdu1* gene, which reduces its grain cadmium levels to less than half of the levels observed in durum varieties without this gene (e.g. Desert King, Orita and Fortissimo). Low cadmium levels are beneficial for human health.

Area of adaptation and primary use: **UC-Desert Gold** performed very well in the South San Joaquin and Imperial Valleys where it showed high yield potential under irrigation and good resistance to diseases. **UC-Desert Gold** primary use is for pasta.

Procedures to maintain stock seed classes: The Department of Plant Sciences at UC Davis will maintain breeder seed. Foundation seed will be produced and distributed by the Foundation Seed Program of the University of California, Davis. The California Crop Improvement Association will provide certification services. New breeder seed will be produced as needed from head-row progenies obtained from the original breeder seed lot. Increases of foundation seed from foundation seed are allowed for indefinite number of cycles.

Intellectual property protection: **UC-Desert Gold** is protected under Plant Variety Protection under Title V, and is sold as certified seed. To obtain information and/or a license for UC-Desert Gold contact the University of California, Davis UC Davis InnovationAccess: Denise L. Meade, Senior Intellectual Property Analyst, tel. (530) 754-8674, dlmeade@ucdavis.edu.