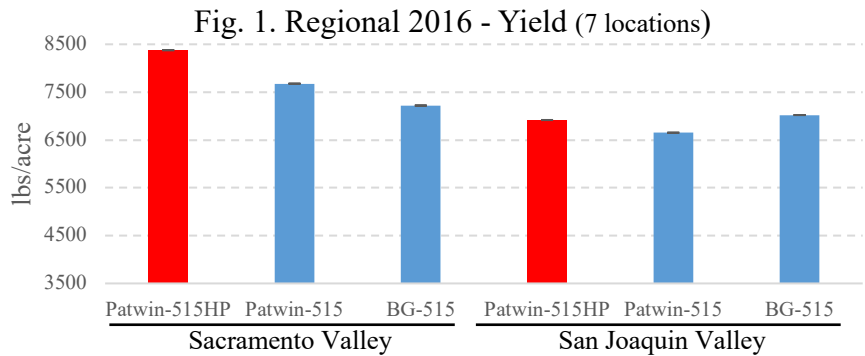


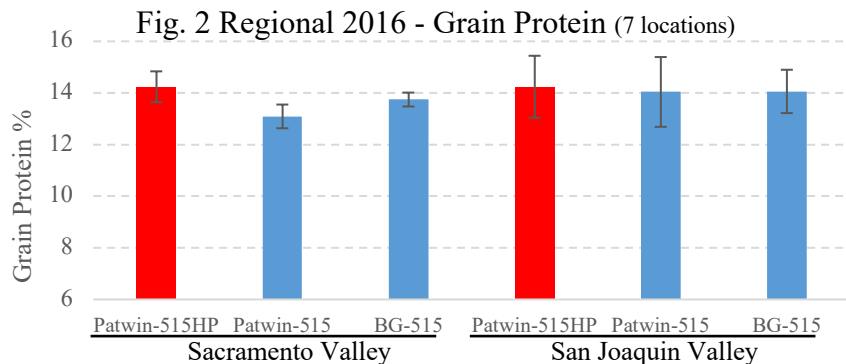
UC Davis Hard White Spring wheat variety ‘Patwin-515HP’

Patwin-515HP is a Hard White Spring hexaploid wheat variety developed by the University of California wheat breeding program and tested in Regional Yield trials as line UC1743.

Yield: **Patwin-515HP** is a semidwarf variety with an intermediate heading time similar to Patwin and Blanca Grande-515. In the 2016 Regional Trials, **Patwin-515HP** grain yield was higher than Blanca Grande-515 in the Sacramento Valley (~15%) and similar in the San Joaquin valley (Fig. 1). The average yield of Patwin-515-HP across 15 experiments was slightly higher (126 lbs/ac) than the original Patwin-515 (but not significantly).



Quality: **Patwin-515HP** showed outstanding bread making quality in evaluations performed by the quality Laboratory at the California Wheat Commission in 2013 and 2016 and by the milling industry at the California Wheat Collaborator Program in 2013. **Patwin-515HP** carries the *GPC-B1* gene for high grain protein content. Across 15 experiments, it showed an average grain protein content of 13.8%, which was significantly higher than the original Patwin-515 (12.7%), which does not carry the *GPC-B1* high grain protein gene (Fig. 2).



Disease resistance: **Patwin-515HP** is resistant to all current races of stripe rust present in California and shows good tolerance for BYDV and septoria tritici blotch. It shows higher resistance to septoria tritici blotch than Blanca Grande-515. Patwin-515HP carries rust resistance genes *Yr5*, *Yr15*, and *Yr36* that are effective against all current races of stripe rust in California.

Area of adaptation and primary use: **Patwin-515HP** is very well suited for the Sacramento, San Joaquin and Imperial Valleys where it shows high yield potential under irrigation. Its primary use is for bread production.

Seed Availability: Foundation seed of Patwin-515HP is distributed by the University of California Foundation Seed Program to licensed brokers and seed houses twice annually, fall and spring. Commercial seed is available to growers.