1. Grain yield in the Reardan spring barley trial averaged 4350 lb/ac, about 28% higher than the average 2-year yield for this location. The Reardan nursery was located about 7 miles west of Reardan, WA (Hal Johnson, cooperator).

2. This nursery was seeded on 17 April, 2009 following winter wheat. Seed was placed at a 90#/acre seeding rate using a no-till plot drill fitted with Cross-slot openers set on 10-inch spacing. Base fertilizer included 65#N and 5#S applied in the fall and 20#N, 4#P, and 4#S per acre applied in the spring. The alpha lattice experimental designs improved variation allocation during statistical analysis and the CV by 68% compared to an RCBD design.

3. Yields ranged from 3200 lb/ac to 5420 lb/ac, with a CV of 9%. Yield values within the LSD range of the highest yield are shown in bold and 4 of the 36 entries are in this group. Six-row entries are listed in italicized print and the hulless cultivars are designated.

4. Test weights were good with an average of 51.4 lb/bu with a range of 48.8 lb/bu to 57.1 lb/bu. Plump grain (>6/64" screen) averaged 94%. Grain protein was high and averaged 14.4%. The average plant height was 21 inches.