

Description: Excelsior Gold two-row spring malting barley

Updated April 2024

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Pedigree: CU31 (SR564R-4): AAC Synergy/Craft (Betzes/Domen//Baronesse)

Grain Yield: In four years of testing, Excelsior Gold averaged 64 bu/a, 7 bu/a lower grain yield than AAC Synergy, 1 bu/a lower than Newdale and ND Genesis.

Test Weight: Over four years, Excelsior Gold averaged 47.9 lb/bu. AAC Synergy averaged 46.4 lb/bu, Newdale averaged 46.6, and ND Genesis averaged 47.2.

Lodging Resistance: Lodging has been very low in our spring malting barley trials the past four years and Excelsior Gold had lodging scores lower than the checks.

Disease Resistance: Excelsior Gold is highly resistant to spot blotch (*Bipolaris sorokiniana*). Over four years this line is moderately susceptible to Fusarium head blight. The FHB index was 4.2 and DON was 5.8 for Excelsior Gold compared to 2.0 and 6.2ppm for AAC Synergy and 8.1 and 4ppm for Newdale.

Quality Characteristics: Excelsior Gold has been evaluated for malting quality for four years and has satisfactory malting properties comparable to the high malting quality line AAC Synergy. Excelsior Gold has somewhat elevated beta-glucan, moderate grain protein and good malt extract. It has moderate water sensitivity. It is resistant to preharvest sprouting with a score of 2.5 compared to 5.2 for AAC Synergy, 4.6 for Newdale, and 2.6 for ND Genesis. Percent plump kernels is 96 compared to 96 for AAC Synergy and 92 for Newdale. The all-malt quality score was 43 compared to 34 for AAC Synergy and Newdale.

Morphology: Plant height is about 68 cm compared to 63 cm for AAC Synergy and 59 for Newdale. This line shows good spike emergence. Heading date is three days earlier later than AAC Synergy and four days earlier than Newdale. Excelsior Gold is erect to semi-erect in early growth. Excelsior Gold spikes are smooth-awned, erect, dense, with awn length equal to or longer than the spike. Kernels have an adhering hull, short rachilla hairs, white aleurone, medium glume awns (same length as kernel), slightly wrinkled hull, and horseshoe depression.

Status of Breeder Seed: Excelsior Gold Foundation seed is available from the New York Seed Improvement Project. This line is available to the New York seed industry as a non-exclusive release variety with Breeder, Foundation, and Certified classes. All seed sales must be a class of certified seed.