

Application for Variety Certification

A. Variety Name:

D 1856 (Pending name: Excell) *Approved for certification by ACIA*

B. Origin and Breeding History:

D 1856 is a semi-dwarf spring durum developed by Male Sterile Facilitated Recurrent Selection (MSFRS) breeding. It was increased from a single F² head selection made from World Wide Wheat, L.L.C.'s quality desert durum population grown at Maricopa, Arizona in 1991. Increases were alternated with single head selection at Maricopa and "best plant" selection at Moscow, Idaho. Yield evaluation began in 1994 with seed from an F6 row. A breeder seed increase was made at Maricopa in 1995 with seed from F8 rows. Foundation seed was grown at Maricopa in 1996. In 1997 Foundation seed was grown at Quincy, Washington from the 1996 head rows.

D 1856 has shown yield stability and uniformity, except slightly taller plants were rogued from the 1996 foundation field at approximately 1 in 1,000 plants. Male sterility seems unlikely to be a problem, but because recessive male sterility was utilized in the development, seed set on unidentified male sterile plants may appear at .001 percent level in the next generation. Slightly taller plants may also occur at the .001 percent level.

C. Detailed Description:

D 1856 is most similar to Eddie, except Eddie has a longer more compact spike, smaller seeds and is three days earlier when 50% headed. Eddie has longer glume beaks and shoulders are elevated. Shoulders of D 1856 are oblique or wanting. D 1856 is a short durum with white awns, glumes and stems at maturity. Spikes are long, slightly tapered, semi-compact and erect, inclining at less than 10°. Peduncle (upper stem internode) is relatively straight when compared to the snakiness of Eddie, Ria, Reva and Durex, all white chafed durums. Lodging susceptibility is slight, similar to Eddie & Duraking, and somewhat less than Ria. Plant height at maturity is two to three inches more than Duraking, but shorter than Durex. Maturity (50% headed) is three days later than Eddie is, similar to Ria, Reva or Duraking. Seed size is similar to Reva, larger than Eddie or Duraking and smaller than Durex. Seeds are elliptical, amber and free of black point with shallow creases and rounded cheeks. Test weight averaged 63.6 pounds per bushel, and is similar to Eddie, Ria Reva and somewhat less than Duraking. Glumes are large and wide, with wide acute beaks 1.5mm long and shoulders are oblique or wanting. The anther color is purple.