

Application for Certification Eligibility

For Hard Red Spring Wheat Variety Powerplay

1. Powerplay is a hard red spring wheat variety developed by Trigen Seed LLC, which is now owned by Limagrain Cereal Seeds LLC in Ft. Collins, CO.
2. Powerplay is derived from a cross Buck Antorcha/Norm-8B//Granger made by Trigen Seed LLC. We used a bulk selection method with an airstream selection of grain up to the F6 generation. This was followed by the increase of a single head selections of an F6 heads i.e. F7 generation seed. All further increases of Powerplay were derived from the F8 seed from a single F7 head-row.
3. Powerplay performance has been evaluated in Minnesota and North Dakota starting in 2005 where it displayed competitive performance relative to popular checks. It is well adapted in the Northern Plains. It has the high molecular weight glutenin subunit (HMWGS) formula of 2*, 7+9, 5+10, which is the same formula as that of Glenn, the Wheat Quality Council's benchmark for bread. It also produces good grain protein, quality Baking tests, *per se*, have not been performed, but the protein and HMWGS formula auger well for satisfactory quality for breadstuffs.
4. Powerplay is a stable variety with less than 14 taller variants per 100,000 (0.014%). There are no restrictions with respect to geographic area of seed production, age of stand or other factors affecting genetic purity.
5. Identifying characteristics from the Objective Description.
 1. Kind: common
 2. Growth habit: spring
 3. Coleoptile color: white
 4. Juvenile growth habit: erect
 5. Leaf color at boot: green
 6. Flag leaf: recurved, not twisted, not waxy
 7. Ear emergence: 66 days, 1 day before Faller
 8. Anther color: yellow
 9. Plant height: 73cm, 2cm taller than Verde
 - 10A. Stem: Anthocyanin absent,
 - 10B. Stem Waxy bloom absent
 - 10C. Stem: Hairiness absent
 - 10D. Stem: Internodes hollow, 4 nodes
 - 10E. Stem: Peduncle erect, 36 cm long
 - 10F. Stem: Auricle anthocyanin and hair absent
 11. Head: Lax, oblong, inclined, awned
 12. Glumes: white, medium long, narrow width, not pubescent, shoulder square, medium wide, beak acuminate and narrow
 13. Seed: hard, red, ovate, rounded cheek, crease narrow and shallow, 36 g/1000, germ midsize
 14. Resistant to stripe-, leaf-, and stem rusts; Intermediate to bacterial blight, tan spot and scab
5. Powerplay is most like Faller but differs in that it has higher test weight, higher grain protein, heads about a day earlier, which leads to slightly earlier maturity, has shorter plant height and better resistance to lodging. Faller, however, is moderately resistant to leaf diseases whereas Powerplay is moderately susceptible.
6. Breeder, Foundation, Registered and Certified classes will be recognized. Breeder seed of Powerplay will be maintained by Limagrain Cereal Seeds LLC. AOSCA guidelines for seed certification will be followed to maintain genetic purity and to identify further multiplication of foundation, registered and certified seed of the variety.
6. Plant Variety Protection application will be made after the 2011 harvest and before one year after the first date of sale with the Title V option that it can be sold only as a class of certified seed.
7. There are no additional restrictions on the variety that affect genetic purity.

Developer: _____

Robert W. Romig

Date: _____

6/9/11