

SY605 CL (03S0409-16)

1. SY605 CL (Experimental designation - 03S0409-16) is a hard red spring wheat bred and developed by Syngenta Seeds, Inc.
2. SY605 CL originated from the cross “AP601 CL/AP602 CL//Briggs” and was developed using a modified single seed descent breeding method. SY605 CL was selected for high yield, good agronomics, general disease resistance and tolerance to BASF herbicide “Beyond”.
3. SY605 CL has been primarily tested across North Dakota and eastern Montana since 2006. It has yielded very well across the region relative to popular checks. It will primarily be used in “Clearfield” production systems.
4. SY605 CL has moderate resistance to the prevalent races of leaf rust.
5. Identifying characteristics – insert the descriptive term from the Objective Description except where indicated:

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| 1. <u>Kind</u> : common | 2. <u>Growth habit</u> : spring |
| 3. <u>Coleoptile color</u> : white | 4. <u>Juvenile growth habit</u> : erect |
| 5. <u>Leaf color at boot</u> : green | 6. <u>Flag leaf at boot</u> : erect, twisted and waxey |
| 7. <u>Auricle color</u> : purple | 8. <u>Days to 50% heading</u> : 55 |
| 9. <u>Anther color</u> : yellow | 10. <u>Stem color</u> : white |
| 11. <u>Plant height (cm)</u> : 84 | 12. <u>Internodes</u> : hollow |
| 13. <u>Spike shape</u> : tapering | 14. <u>Spike density</u> : middense |
| 15. <u>Spike curvature</u> : inclined | 16. <u>Awn type</u> : awned |
| 17. <u>Awn color</u> : white | 18. <u>Glume color</u> : white |
| 19. <u>Glume length</u> : short | 20. <u>Shoulder shape</u> : rounded |
| 21. <u>Shoulder width</u> : wide | 22. <u>Beak shape</u> : acuminate |
| 23. <u>Beak length (S, M, L, VL)</u> : M | 24. <u>Glume pubescence</u> : absent |
| 25. <u>Seed color</u> : red | 26. <u>Seed shape</u> : ovate |
| 27. <u>Checks</u> : angular | 28. <u>Brush size (S, M, L)</u> : short & large area |
| 29. <u>Avg 1,000 kernel wt (g)</u> : 37 | 30. <u>Phenol reaction</u> : not tested |
| 31. <u>Other</u> : | |
| Physiological/biochemical traits: | |

Other characteristics (*e.g.*, herbicide tolerance): Tolerant to BASF herbicide “Beyond” (active ingredient – imazamox).

Variants: Less than 0.8% of the plants were rogued from the breeder seed increase. All of the rogued variant plants were taller height wheat plants (8 to 15 cm). Up to 1.0% variant plants may be encountered in subsequent generations.

6. Recognized classes of SY605 CL are breeder, foundation, registered and certified. Syngenta Seeds, Inc. will maintain the variety by the headrow method. SY605 CL may only be sold as a class of certified seed and all seed sales are royalty bearing.
7. Certified seed sales of SY605 CL will be available in the spring of 2011.
8. Plant Variety Protection will be submitted in 2010 and SY605 CL may only be sold as a class of certified seed.
9. Certified acreage is not to be published by AOSCA and certifying agencies.

