

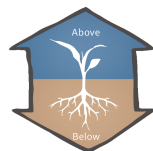
CRM:105 Positioning For:

Silk CRM: 105
Phy. CRM: 108
GDUs to Silk: 1310
GDUs to Phy. Mat.: 2600



MANAGEMENT COMMENTS

- 105 CRM hybrid with exceptional drought tolerance and good versatility.
- Excellent Yield potential.
- Strong agronomic package including strong roots.
- Good Goss's Wilt tolerance and Gray Leaf spot tolerance.
- May respond to a foliar fungicide in fields with a history of Northern Corn Leaf Blight.



REFUGE

Integrated Refuge

- 95% (RW, YGCB, HXX, LL, RR2)
- 5% (LL, RR2)

MARKET SEGMENTS

HTF: High Total Fermentables (Dry-Grind Ethanol)
AQ: Optimum® AQUAmax(TM) hybrids for water-limited environments

SUITABILITY RATINGS

KEY ENVIRONMENTS

High Yield Environment Highly Suitable

SUITABILITY

Corn After Corn Suitable
High Residue Suitable
Late Harvest Suitable

SOILS

Drought Prone Soils Highly Suitable
Early Planting/Cold Soils Highly Suitable
Poorly Drained Soils Suitable

CHARACTERISTIC SCORES

Drought Tol.	9
Mid-Season Brittle Stalk	6
Plant Ht.	4
Ear Ht.	5
Root Strength	8
Stalk Strength	5
Test Wt.	5
Staygreen	6
Stress Emergence	7

DISEASE SCORES

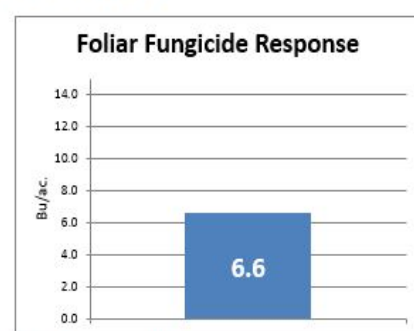
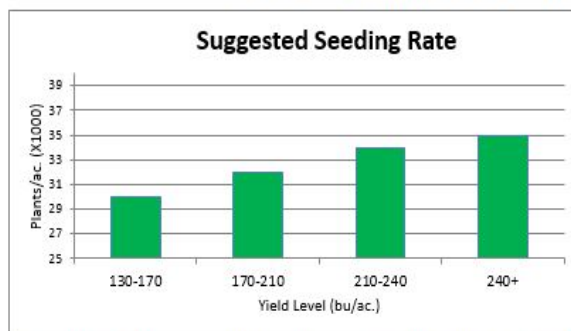
Goss's Wilt	6
Gray Leaf Spot	5
No. Leaf Blight	4

TRAIT SCORE RATINGS: 9 = Excellent; 1 = Poor; Blank = Insufficient Data.

ESTIMATED SEEDING RATE

Contact your Pioneer sales professional for additional information. Planting rate estimates provided for informational purposes only. Information here is provided for a hybrid family and not individual products. Product performance is variable and depends on many factors, such as soil type, management practices, environmental stress, disease, and pest pressure. Individual results may vary. Planting rate and seeding costs have been increased by 5% to account for early season stand loss.

Pioneer Corn Plant Population and Foliar Fungicide Response for Iowa



Suggested Seeding Rate based on 2014 to 2019 on-farm locations in Iowa and 2013 to 2019 small plot data from North America.
Foliar Fungicide response based on 2015 to 2019 on-farm locations in Iowa, including applications made at VT or after and all crop rotations.
P0589 - Suggested seeding rate and fungicide data based on hybrid family.

AQ - Optimum® AQUAmax® product. Product performance in water-limited environments is variable and depends on many factors such as the severity and timing of moisture deficiency, heat stress, soil type, management practices and environmental stress as well as disease and pest pressures. All products may exhibit reduced yield under water and heat stress. Individual results may vary.

AMXT (Optimum® AcreMax® XTreme) - Contains a single-bag integrated refuge solution for above- and below-ground insects. The major component contains the Agrisure® RW trait, the YieldGard® Corn Borer gene, and the Herculex® XTRA genes. In EPA-designated cotton growing counties, a 20% separate refuge must be planted with Optimum AcreMax XTreme products.

IMPORTANT: Trait rating scores provide key information useful in selection and management of Pioneer® brand products in your area. Information and ratings are based on comparisons with other Pioneer brand products, not competitive products. Information and scores are assigned by Pioneer Research Managers. Scores are based on period-of-years testing through 2020 harvest and were the latest available at time of printing. Some scores may change after 2021 harvest. Scores represent an average of performance data across areas of adaptation, multiple growing conditions, and a wide range of both climate and soil types, and may not predict future results. All products within a hybrid family receive the same score unless observations indicate a significant difference. Individual product responses are variable and subject to a variety of environmental, disease and pest pressures. Please use this information as only one component of your product positioning decision. Refer to www.pioneer.com or contact a Pioneer sales professional for the latest and most complete listing of traits and scores for each Pioneer brand product and for product placement and management suggestions specific to your operation and local conditions.



TECHNOLOGY SEGMENT: AM1 - Optimum® AcreMax® 1 insect protection system with an integrated corn rootworm refuge solution includes HXX, LL, RR2. Optimum AcreMax 1 products contain the LibertyLink® gene and can be sprayed with Liberty® herbicide. The required corn borer refuge can be planted up to half a mile away. AM - Optimum® AcreMax® insect protection system with YGCB, HX1, LL, RR2. Contains a single-bag integrated refuge solution for above-ground insects. In EPA-designated cotton-growing counties, a 20% separate corn borer refuge must be planted with Optimum AcreMax products. AMT - Optimum® AcreMax® TRIssect® insect protection system with RW, YGCB, HX1, LL, RR2. Contains a single-bag refuge solution for above- and below-ground insects. The major component contains the Agrisure® RW trait, the Bt trait, and the Herculex® I genes. In EPA-designated cotton-growing counties, a 20% separate corn borer refuge must be planted with Optimum AcreMax TRIssect products. AMX - Optimum® AcreMax® Xtra insect protection system with YGCB, HXX, LL, RR2. Contains a single-bag integrated refuge solution for above- and below-ground insects. In EPA-designated cotton-growing counties, a 20% separate corn borer refuge must be planted with Optimum AcreMax Xtra products. AMXT (Optimum® AcreMax® XTreme) - Contains a single-bag integrated refuge solution for above- and below-ground insects. The major component contains the Agrisure® RW trait, the Bt trait, and the Herculex® XTRA genes. In EPA-designated cotton-growing counties, a 20% separate corn borer refuge must be planted with Optimum AcreMax XTreme products. Q (Qrome®) - Contains a single-bag integrated refuge solution for above- and below-ground insects. The major component contains the Agrisure® RW trait, the Bt trait, and the Herculex® XTRA genes. In EPA-designated cotton-growing counties, a 20% separate corn borer refuge must be planted with Qrome products. Qrome® products are approved for cultivation in the U.S. and Canada. They have also received approval in a number of importing countries, most recently China. For additional information about the status of regulatory authorizations, visit <http://www.biotechstatus.com/>. YGCB, HX1, LL, RR2 (Optimum® Intrasect®) - Contains the Bt trait and Herculex® I gene for resistance to corn borer. YGCB, HXX, LL, RR2 (Optimum® Intrasect® Xtra) - Contains the Bt trait and the Herculex XTRA genes for resistance to corn borer and corn rootworm. RW, HX1, LL, RR2 (Optimum® TRIssect®) - Contains the Herculex I gene for above-ground pests and the Agrisure® RW trait for resistance to corn rootworm. AML - Optimum® AcreMax® Leptra® products with AVBL, YGCB, HX1, LL, RR2. Contains a single-bag integrated refuge solution for above-ground insects. In EPA-designated cotton-growing counties, a 20% separate corn borer refuge must be planted with Optimum AcreMax Leptra products. AVBL, YGCB, HX1, LL, RR2 (Optimum® Leptra®) - Contains the Agrisure Viptera® trait, the Bt trait, the Herculex® I gene, the LibertyLink® gene and the Roundup Ready® Corn 2 trait. HX1 - Contains the Herculex® I insect protection gene which provides protection against European corn borer, southwestern corn borer, black cutworm, fall armyworm, lesser corn stalk borer, southern corn stalk borer, and sugarcane borer; and suppresses corn earworm. HXRW - The Herculex® RW rootworm protection trait contains proteins that provide enhanced resistance against western corn rootworm, northern corn rootworm and Mexican corn rootworm. HXX - Herculex® XTRA contains the Herculex I and Herculex RW genes. YGCB - The Bt trait offers a high level of resistance to European corn borer, southwestern corn borer and southern cornstalk borer; moderate resistance to corn earworm and common stalk borer; and above average resistance to fall armyworm. LL - Contains the LibertyLink® gene for resistance to Liberty® herbicide. RR2 - Contains the Roundup Ready® Corn 2 trait that provides crop safety for over-the-top applications of labeled glyphosate herbicides when applied according to label directions. Roundup Ready® is a registered trademark used under license from Monsanto Company. Liberty®, LibertyLink® and the Water Droplet Design are registered trademarks of BASF. Agrisure® and Agrisure Viptera® are registered trademarks of, and used under license from, a Syngenta Group Company. Agrisure® technology incorporated into these seeds is commercialized under a license from Syngenta Crop Protection AG.
