

Table 52

Calculation for Approval of Sugarbeet Varieties for ACSC Aphanomyces Specialty Market for 2004

| Chk | Description | Approval Status | Foliar Aph. Rating | | | | Cercospora Rating** | | | | | Root Aph. Rating | | | | | | |
|--|--|-----------------|--------------------|------|------|-----------|---------------------|------|------------------|------|-----------|------------------|------|------|------|-----------------|-------------|--|
| | | | 2001 | 2002 | 2003 | 2 Yr Mean | 3 Yr Mean | 2001 | 2002 | 2003 | 2 Yr Mean | 3 Yr Mean | 2001 | 2002 | 2003 | 2 Yr Mean | 3 Yr Mean | |
| Previously Approved (3 Yrs) | | | <=3.50 | | | | | | <=5.40 | | | | | | | | | |
| | Beta 3800(Aph) | Approved | 3.11 | 2.70 | 2.67 | 2.68 | 2.83 | 4.53 | 4.70 | 4.71 | 4.70 | 4.64 | 4.45 | 4.42 | 4.47 | 4.42 | 4.45 | |
| | Beta 3820(Aph) | Approved | 3.36 | 3.07 | 2.39 | 2.73 | 2.94 | 4.35 | 4.37 | 4.28 | 4.33 | 4.34 | 4.93 | 4.59 | 4.45 | 4.59 | 4.65 | |
| | Beta 4811R(Aph & Rzm) | Approved | 2.78 | 2.92 | 3.20 | 3.06 | 2.97 | 5.06 | 4.39 | 4.44 | 4.42 | 4.63 | 3.50 | 4.42 | 4.18 | 4.42 | 4.03 | |
| | Beta 4818R(Aph & Rzm) | Approved | 3.11 | 2.85 | 3.74 | 3.29 | 3.23 | 4.63 | 4.95 | 4.92 | 4.93 | 4.83 | 3.98 | 4.59 | 4.43 | 4.59 | 4.33 | |
| | Beta 6400(Aph) | Approved | 2.78 | 2.92 | 2.63 | 2.78 | 2.78 | 4.46 | 4.56 | 4.01 | 4.28 | 4.34 | 4.45 | 4.74 | 4.23 | 4.74 | 4.48 | |
| | Crystal 820 | Approved | 2.78 | 2.92 | 2.74 | 2.83 | 2.82 | 4.66 | 4.79 | 4.48 | 4.64 | 4.64 | 4.45 | 4.74 | 4.10 | 4.74 | 4.43 | |
| | Crystal 822 | Approved | 2.70 | 2.62 | 2.42 | 2.52 | 2.58 | 4.49 | 4.74 | 4.64 | 4.69 | 4.62 | 4.60 | 4.59 | 4.46 | 4.59 | 4.55 | |
| | Crystal 952 | Approved | 2.62 | 2.92 | 2.43 | 2.68 | 2.66 | 4.42 | 4.70 | 4.28 | 4.49 | 4.47 | 4.60 | 4.59 | 4.32 | 4.59 | 4.50 | |
| | Hilleshog 2236(Aph) | Approved | 2.95 | 2.25 | 3.07 | 2.66 | 2.76 | 4.00 | 4.33 | 3.71 | 4.02 | 4.01 | 4.29 | 4.25 | 4.72 | 4.25 | 4.42 | |
| | Hilleshog 2239(Aph) | Approved | 2.70 | 2.40 | 2.63 | 2.51 | 2.58 | 4.93 | 4.90 | 4.87 | 4.89 | 4.90 | 4.60 | 4.25 | 4.16 | 4.25 | 4.34 | |
| | Seedex Aurora(SX823 925 Aph) | Approved | 2.78 | 2.85 | 3.63 | 3.24 | 3.09 | 4.03 | 4.10 | 4.25 | 4.17 | 4.13 | 4.45 | 4.74 | 4.65 | 4.74 | 4.61 | |
| | Van der Have H46177(Aph & Rzm) | Approved | 2.78 | 2.77 | 2.94 | 2.86 | 2.83 | 4.35 | 4.09 | 3.90 | 3.99 | 4.11 | 4.13 | 4.25 | 4.64 | 4.25 | 4.34 | |
| Candidates for Approval (2 Yrs) | | | <= 3.22 | | | | <=5.20 | | | | | | | | | | | |
| | Beta BX1194(Aph) | Approved | 2.92 | 2.92 | 2.92 | | | 4.72 | 4.33 | 4.52 | | | 5.08 | 5.06 | 5.07 | | | |
| | Hilleshog 2264(7164 Aph) | Approved | 2.32 | 2.10 | 2.21 | | | 4.46 | 4.01 | 4.23 | | | 4.09 | 4.35 | 4.22 | | | |
| | Hilleshog 2469(7169 Rz Aph) | Approved | 2.62 | 2.30 | 2.46 | | | 4.84 | 4.79 | 4.82 | | | 4.42 | 3.67 | 4.04 | | | |
| | Seedex SX0822(Aph & Rzm) | Approved | 2.92 | 2.46 | 2.69 | | | 3.75 | 3.90 | 3.82 | | | 4.59 | 4.67 | 4.63 | | | |
| | Seedex SX0828(Aph & Rzm) | Approved | 2.99 | 3.01 | 3.00 | | | 5.18 | 5.20 | 5.19 | | | 5.72 | 5.05 | 5.39 | | | |
| | Van der Have H46521(Aph & Rhc) | NO | 3.22 | 5.53 | 4.37 | | | 4.32 | 3.93 | 4.12 | | | 5.08 | 6.89 | 5.98 | | | |
| | Van der Have H66725(Aph) | Approved | 2.92 | 3.46 | 3.19 | | | 4.78 | 5.16 | 4.97 | | | 5.40 | 5.81 | 5.61 | | | |
| Check Varieties | | | | | | | | | | | | | | | | | | |
| 1 | Beta 3800(Aph Chk) | | 3.11 | 2.47 | 2.54 | 2.51 | 2.71 | | | | | | 4.45 | 4.09 | 3.96 | 4.03 | 4.17 | |
| 1 | Crystal 960(Aph Chk) | | 2.53 | 2.54 | 3.08 | 2.81 | 2.72 | | | | | | 4.29 | 4.25 | 5.05 | 4.65 | 4.53 | |
| 1 | Crystal 999(Aph Chk) | | 3.19 | 3.15 | 3.06 | 3.11 | 3.13 | | | | | | 4.77 | 4.91 | 4.95 | 4.93 | 4.88 | |
| 1 | Hilleshog Resist(Aph Chk) | | 2.13 | 3.15 | 3.32 | 3.24 | 2.87 | | | | | | 3.50 | 4.74 | 5.34 | 5.04 | 4.53 | |
| 1 | Van der Have H46140(Aph Chk) | | 3.03 | 2.70 | 2.85 | 2.78 | 2.86 | | | | | | 5.24 | 4.25 | 4.47 | 4.36 | 4.65 | |
| 5 | Check Mean | | 2.80 | 2.80 | 2.97 | 2.89 | 2.86 | | | | | | 4.45 | 4.45 | 4.75 | 4.60 | 4.55 | |
| | Approval Criteria (115% for new varieties) | | | | | 3.32 | | | | | 5.20 | | | | | 2004 approval = | 4.90 | |
| | (125% for continued approval) | | | | | | 3.57 | | | | | 5.40 | | | | | 5.20 | |

** All Cercospora readings 2002-2003 were adjusted to 1982 basis.

Aphanomyces new variety approval criteria: 2 years of official trial data, Aphanomyces disease rating must not exceed 115% of Beta 3800, Crystal 960, Crystal 999, Hilleshog Resist, van der Have H46140 and Cercospora rating must not exceed 5.20 (1982 adjusted data).

Aphanomyces continued approval criteria: 3 years of official trial data, Aphanomyces disease rating must not exceed 125% of Beta 3800, Crystal 960, Crystal 999, Hilleshog Resist, van der Have H46140 and Cercospora rating must not exceed 5.40 (1982 adjusted data).

Aphanomyces approval criteria in 2004 will be based upon 3 year of data and root rot ratings rather than the current foliar ratings.