

## Report of the Subcommittee for Germplasm Releases

The following germplasms were released since the 2002 report:

<u>Release</u>	<u>Source</u>	<u>Comments</u>
<b>Inbreds:</b>		
CGR01	((B93 x NK2555) x NK2555)-B-2-7-1-1	Yellow dent-type, red cobbled inbred line, that flowers in ~81 days. Tested on LH198, LH185, LH304, and LH295. Performs better on non-SS types.
CGR02	(CG44x(MF4xP1247)-3)-B-2-1-1-1	Yellow dent-type, red cobbled inbred line, that flowers in ~81 days. Tested on LH198, LH185, LH304, and LH295. Good general combining ability.
CGR03	((B100 x NK2555) x derivation NK2555)-B-1-5-1-1	Yellow dent-type, red cobbled inbred line, that flowers in ~81 days. Tested on LH198, LH185, LH304, and LH295. Performs better on SS types.
CGR04	(B93 x NK2555)-B-3-2-1-1	Yellow dent-type, red cobbled inbred line, that flowers in ~81 days. Tested on LH198, LH185, LH304, and LH295. Performs better on non-SS types.
CGR05	(Cargill5677 x CG103)-B-1-4-1-1	Yellow dent-type, redish pericarp, white cobbled inbred line, that flowers in ~81 days. Tested on LH198, LH185, LH304, and LH295. Performs better on SS types.
CGR06	((Cargill5677xCG EliteB C4S3)xCargill5677)-B-2-4-1-1	Yellow dent-type, red cobbled inbred line, that flowers in ~79 days. Evidence of susceptibility to kernel red streaking. Tested on LH198, LH185, LH304, and LH295. Good general combining ability.
CG110	(CCGP A C2 x NK2555)	Yellow dent-type, red cobbled inbred line, that flowers in ~69 days. Tested on CG60/CG62 (Iodent), CG102 (SS type), LH162, MBS1236, LH177/LH176, and an early B37-type. Performed best on early Iodents and LH177/LH176.
CG111	(CCGP B C2 x NK2555)	Yellow dent-type, white cobbled inbred line, that flowers in ~68 days. Tested on CG60/CG62 (Iodent), MBS1236, LH177/LH176, and an early B37-type. Good general combining ability.
CG112	(CG SynA x Pioneer3475)	Sister-line of CG113, yellow dent-type, white cobbled inbred line, that flowers in ~69 days. Tested on CG60/CG62 (Iodent), CG102 (SS type), LH162, MBS1236, LH177/LH176, and MBS4310. Performed best on LH162 and LH177/LH176.
CG113	(CG SynA x Pioneer3475)	Sister-line of CG112, yellow dent-type, white cobbled inbred line, that flowers in ~68 days. Tested on CG60/CG62 (Iodent), CG102 (SS type), LH162, MBS1236, LH177/LH176, and MBS4310. Performed best on LH177/LH176.
CG114	(CG102 x G-4193)	Yellow dent-type, white cobbled inbred line, that flowers in ~72 days. Tested on CG60/CG62 (Iodent), MBS1236, LH177/LH176, and MBS4310. Performed best on non-SS types.
CG115(W)	(CG CBI C3 x Pioneer3876)	White semi dent-type, white cobbled inbred line, that flowers in ~71 days. Novel <i>y1</i> mutation arose in CG CBI S2 line, <i>p11</i> allele is not susceptible to purple kernel streaking (PKS), excellent stalk and root quality. Tested on CG60/CG62 (Iodent), MBS1236, LH177/LH176, and MBS4310. Just missed the performance cut-off, however, it is an extremely early white inbred line with excellent plant and kernel characteristics.

GEMS-0002 GEM population FS8A(S):S09

S<sub>3</sub> maize germplasm demonstrates good general combining ability with 'Lancaster Sure-Crop' related testers. Average yield of testcrosses was 95% of the mean of commercial check hybrids. Moisture content of the testcrosses was consistently about 2 points below the average of check entries, and stalk lodging was about equal. The line flowers approximately one week before B73 and has smaller plant stature with ears borne at mid-plant height. Semi-flinty kernels are dark yellow to orange.

B122 BSKRL2(HI)C0-7203-3-2-01-01-03-B-B (02SKRL:B4:8620)

B122 was derived from a narrow base synthetic (BSKRL2) composed of the five inbreds B90, B91, B95, B97, and B99. B122 has performed well on commercial tester inbreds from the stiff stalk heterotic pattern. It has better or comparable dry down, improved root and stalk lodging, and equivalent or better yield (depending on the tester) than comparable commercial checks.

B123 BSKRL2(HI)C0-7314-2-1-01-01-01-B-B (02SKRL:B4:8635)

B123 was derived from a narrow base synthetic (BSKRL2) composed of the five inbreds B90, B91, B95, B97, and B99. B123 has performed well on commercial tester inbreds (particularly SGI912) from the stiff stalk heterotic pattern. It has better or comparable dry down, improved root and stalk lodging, and equivalent or better yield (depending on the tester) than comparable commercial checks.

B124 BSKRL2(HI)C0-7370-2-2-02-01-02-B-B (02SKRL:B4:8650)

B124 was derived from a narrow base synthetic (BSKRL2) composed of the five inbreds B90, B91, B95, B97, and B99. B124 has performed well on commercial tester inbreds (particularly SGI912) from the stiff stalk heterotic pattern. B124 has shown a susceptibility to root lodging, but did show strong consistent yield on SGI912 winning in all 10 locations in 2002. In crosses with SGI912, B124 ranked 11 for grain yield (12 bu/ac less than the top commercial check)

B125 BSKRL2(HI)C0-7383-3-2-01-01-03-B-B (02SKRL:B4:8665)

B125 was derived from a narrow base synthetic (BSKRL2) composed of the five inbreds B90, B91, B95, B97, and B99. B125 has performed well on commercial tester inbreds from the stiff stalk heterotic pattern and seems to perform well with a broader range of testers than B122, B123, or B124. B125 has had outstanding resistance to root and stalk lodging and excellent dry down at harvest. When crosses with SGI890, B125 ranked 3 overall in the test for grain yield and was in the bottom 1/3 driest for grain moisture

### Populations and Synthetics:

WQS C2 Wisconsin Quality Synthetic – a corn silage germplasm of approximately 50% Lancaster background (H99 and Mo17) and 50% broadly-based, high-quality germplasm from northern temperate regions.

The Wisconsin Quality Synthetic (WQS) is a broad-based synthetic with a maturity of approximately 100 to 110RM. WQS C2 was developed by two cycles of S<sub>2</sub> topcross recurrent selection for high forage yield and quality in crosses to LH119 (cycle 1) and LH198 (cycle 2). WQS C2 has low neutral detergent fiber, high in vitro true digestibility, and high in vitro NDF digestibility.

W.F. Tracy  
L.L. Darrah

D. Willmot  
J.G. Coors, Chair