

4. Glossies

Mixups in glossy stocks have led to much confusion. Some of this confusion can now be cleared up. And a series of glossies from Dr. Sprague have now been converted to stocks which are sufficiently adapted to our conditions so that remaining tests can readily be made. Also tests for placement to chromosome are now being made for all except Sprague's glossy 13, which we have not yet been able to isolate. The numbers given are from Sprague's series.

- gl₁ - chrom 7 all stocks O.K.
- gl₂ - chrom 2 " " "
- gl₃ - chrom 4 " " "
- gl₄ - chrom 4 (Sprague) confirmed. Stock from Cornell O.K.
- gl₅ - two genes giving 15-1 ratios in most crosses with standards, linkage data indicates one of these in chromosome 2. Not yet checked against Laughnan's 15-1 glossy (NL 1953)
- gl₆ - chromosome 3. Stocks from Sprague and Laughman in agreement. A stock received from coop as gl₇ which we reported for chrom 3 is allelic to these, and this correction should be made.
- gl₇ - stock from Sprague is not allelic to the stock from coop which we had listed as gl₇. Crosses with testers have been made but will need another year to locate to chromosome.
- gl₈ - chromosome 5. Stock from coop listed as gl₆ proved to be gl₈ also.
- gl₉ - stock from Sprague proves to be a good clear cut glossy chromosome tests are underway. No glossy found in stocks from coop or from Dr. Burnham.
- gl₁₀ - stock from Sprague gave a good glossy. Crosses made for chromosome tests. Received a stock from Dr. Burnham which he indicated contained also a late developing glossy which he tentatively listed as Hayes glossy. The good glossy from this stock is allelic to Sprague's gl₁₀. Stock listed as gl₁₀ from coop was homozygous for the late developing glossy (see gl₁₅).
- gl₁₁ - stocks from Sprague and Burnham in agreement. Also one mutant from irradiation allelic to these. This glossy is clear-cut; but the glossy plants are delayed in growth, tasseling a week or two later than normal nibs. Chromosome tests are underway.
- gl₁₂-

- gl₁₄- stocks from Sprague only. Crosses made for chromosome placement.
- gl₁₆-
- gl₁₃ - no glossy recognized in stock from Sprague.
- gl₁₅ - stock from Sprague. Late developing, appearing usually in the 3^d leaf. This glossy is very widespread, and has been found in many stocks. "Hayes glossy" from Burnham is the same gene. Location is in chrom 9 near wx from information from Burnham, which we have confirmed in tests with gl₁₅ from several sources. Beside the stocks from Sprague and Burnham we have picked it up from many other sources. Coop stock listed as "gl₁₀" was this gene. Some exotic stocks from Matthews were allelic. It was present as a contaminant in the single cross L289 x 1205 sent to Bikini. It was also isolated from commercial hybrids from Pioneer and other sources.

An additional glossy, listed by Sprague under the temporary symbol gl(g) as not all allele tests had been made, proved allelic to a mutant glossy from irradiation. Chromosome tests are underway on both sources.

Chromosome tests are also underway on a number of glossies from other sources, but since these have not been tested for allelism with the Sprague series, they may duplicate some of the glossies already numbered.

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