

II. REPORTS FROM COOPERATORS

BLANDY EXPERIMENTAL FARM
University of Virginia
Charlottesville, Virginia

1. A yellow green mutant from Afghanistan.

A yellow green mutant was isolated from open pollinated seed from Afghanistan. Pollination of this stock by yg_2 gave seedlings that were all green, hence it is not allelic to yg_2 . Seed is available.

W. Ralph Singleton

2. A mutant for indeterminate growth.

In the same open pollinated lot of corn from Afghanistan there arose a mutant for indeterminate growth similar to one reported earlier (Singleton, Jour. Hered. 37:61-64). The plants continue to grow all summer producing very short internodes, and produce tassels and silks only after being moved into the greenhouse. Apparently the short days inhibit floral development.

W. Ralph Singleton

3. Correlation of silk, anther and pericarp color.

Plants segregating for silk, anther, and pericarp color were classified at time of silking for silk and anther color and later classified for the "cherry" pericarp color or absence of it. In one progeny the following counts were obtained:

Genotype	Silk color.	Anther color.	Cherry Pericarp	
			Present	Absent
R^{mm}	Deep wine	Red-variegated	49	1
R^{gg}	Green	Green	<u>0</u>	<u>27</u>
Total			49	28

Only one exception was noted; this may have been due to faulty classification.

Another progeny produced 31 ears with cherry pericarp from plants with R^{mm} silk and anthers and 25 ears with no pericarp color from plants with green silks and anthers. No exceptions were noted in this progeny.

One progeny in 1959 was homozygous for the deep cherry pericarp, with the usual red silk and anther color. Apparently this mutant behaves similarly to R^{ch} although the plant color is believed darker. Does any one have seed of R^{ch} ?

W. Ralph Singleton