

Descriptions of Geneva Snap Bean Breeding
Lines Available for Trial

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G-3 (White-seeded Slendergreen type). Rogers' Slendergreen was used as the recurrent parent.

G-6 (White-seeded Improved Tendergreen type). Rogers' Improved Tendergreen was used as the recurrent parent.

General Information: The lines were derived by a strict backcross program involving six backcrosses to the recurrent parent. Each line is practically identical to its recurrent parent in plant and pod characteristics except for white seed color and characteristics associated with it.

In tests to determine seed quality, the white-seeded lines have been inferior to the recurrent parents. This inferiority is due to greater susceptibility to decay organisms, transverse cracking of the cotyledons, and possibly to mechanical injury.

Rather extensive experiments on susceptibility to injury, transverse cracking of the cotyledons and seed quality in general indicate that the lines are at least equal to any white-seeded, processing varieties tested, and definitely superior to most white-seeded varieties in regard to the above characters.

Numerous yield trials in New York have indicated that the Geneva lines yield as well as their recurrent parents. However, on a dry seed basis, G3 yields about 15 per cent less than Slendergreen. This is due to seed abortion in the white-seeded type. This abortion does not appear to affect the green pod yield or quality.

Samples of both lines have been processed, both at the Experiment Station and by commercial processors, and then compared with the recurrent parents. General quality appears to be similar to that of the recurrent parents except for white seed.

The seed available in 1959 is not to be considered as foundation seed. Although there has been a vigorous selection against oval pods and other undesirable off-types, there is a small percentage of flat pods in both lines, and a few stringy plants have been found in G3. Foundation seed is being produced at Geneva and will be ready for seed increase in the West in 1960.