

Offer of seed from the Earl Gritton Pea Improvement Program at Madison

I will be retiring from the University of Wisconsin at the end of June, 1996, after nearly 32 years with the Pea Improvement Program. As I make arrangements to leave the Program, I am interested in seeing that the material I have developed and/or accumulated continues to serve pea producers, researchers, and the seed and processing industries. If you feel some of my material might be useful to you, please let me know. The amount of seed I can supply per request will depend on the number of requests received. In addition, I have written to Dr Chuck Simon regarding the possible inclusion of some of this material in the U.S.D.A. collection, and he assures me he would like to preserve this material and make it available to researchers.

I have from 18 to 288 lbs of seed of lines WI 9401 through WI 9416. WI 9401 – WI 9406 have afile-tendrilled acacia foliage. WI 9407 –WI 9416 were developed from the first cycle of the root rot recurrent selection program and some have a degree of root rot resistance.

There is a limited amount of seed from advanced cycles of the *Aphanomyces* root rot recurrent selection program. In 1995, we grew 207 lines which were in the F₆ generation, from selections made from the parent lines of cycle 5. There were 113 lines in the F₃ generation which were selected from cycle 8. There are 18 lines selected from cycle 8 in the F₄ generation, all with resistance to powdery mildew. Plants from cycle 5 of the recurrent selection procedure were crossed with the desirable processing types Bounty, Quantum, FR 33, FR 62, and FR 656. In 1995, we had 196 crosses of this material in the F₅ generation.

For some time, we have been breeding for improved standing ability, or resistance to lodging. In 1995, we grew 121 single plant selections from Bohatyr x Frontier crosses. These plants were in the F₆ generation. In 1995, there were 111 F₅ lines derived from crossing the field pea types Bohatyr, Fjord, Rigel, and Helka with processor types Alsweet II, Bolero, Bounty, FR 33, FR 656, Frontier, Quantum, WA 86-2231, WI 8902, and WI 8904. Fifty eight lines in the F₄ generation derived from crossing the field types with processor types Alsweet II, Bolero, Bounty, FR 33, FR 62, FR 656, Frontier, Quantum, WA 86-2231, WI 8902, and WI 8904 were grown in 1995. In 1995, we grew 40 lines in the F₃ generation derived from crossing (field pea x processor type) x field pea. The crosses were made to combine characteristics of two different field peas with those of a processor type canning or freezing variety.

Some of you may be interested in peas for forage. Growing a blend of peas and small grains for silage or other forage use has become popular in Wisconsin. The following crosses were made with the objective of developing forage peas. These were F₅ plants in 1995, seed bulked at harvest, from plants harvested as single F₄ plants in 1994. The crosses were made among MP 982 (Trapper *af*), Tipu (Century *af*), Frontier *af uni^{iac}*, Frontier *af st*, Fjord, Rigel, Helka, Dark Skin Perfection *af uni^{iac}*, Dark Skin Perfection *af st*, Frontier, Darfon, Dot, and FR 333.

For all but the WI 94- lines, seeds were bulked from all plants in a plot in 1995. Thus, it will be necessary to make single plant selections within each variable line to obtain the types of interest.

There are various other lines of which I have seed. These include all of the releases from the program since I have been here, and include lines for powdery mildew resistance, pea seed borne mosaic virus resistance, root rot resistance, foliage types, and more. There are some

near-isogenic series of foliage types. There are lines segregating for several male sterile genes. There are some crosses between processing types and lines with large root systems. There are lines with markers. And so on. If you don't see listed what interests you - please ask, we may have it.

If you would like some of this material please let me know as soon as possible. I can't promise how quickly I can get the seed out to you, but we will attempt to deal promptly with your enquiry.

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