

A selection from South America (SA-14) also exhibits partial resistance to root rot. The selection is being increased and small amounts of seed for experimental use may be available in 1961.

A seven-year rotation experiment will be concluded in 1960. At this time partial data appears to support the work of others that amendments of a high carbon-to-nitrogen ratio reduces bean root rot. Final data will be forthcoming in 1961.

A Note on Need for Tripping of Flowers of Some Greenhouse-grown Beans.

E. M. Meader and E. C. Corbett

That some varieties of runner bean, *Phaseolus multiflorus* failed to set unless the flowers were tripped by hand has been noted under insect-proof greenhouse conditions. Some F_4 plants from open-pollinated field-grown F_3 seed of Black Runner x Kentucky Wonder, when grown in the greenhouse also failed to set unless the flowers were manipulated. With some plants, pressing down on the wings of the flower just sufficient to cause the tip of the pistil to exert from and then return again into the keel, when pressure was released, brought about normal pod formation. Flowers of some plants responded even more favorably when some of the pollen was transferred from among the hairs just below the stigma up to and on to the stigmatic surface of the pistil. When its flowers were tripped plus hand transference of pollen, a plant that had been setting and holding small pods that were blanks, matured normal pods and dry beans. Thus, a question has arisen as to certain plants we had assumed to be sterile previously.

Two New Selections of Red-seeded Horticultural Beans Ready for Trials

E. M. Meader

NH #HR1 and NH #HR2 are productive bush lines having bright red seeds in carmine pods and can be marketed at the green shell bean stage of maturity either as shelled out beans or as attractive pods. Dry bean uses have not been tested yet. Derived from crosses of Flash and the White Runner bean, *P. multiflorus* involving probable backcrosses through open pollination in the field to nearby horticultural beans, these lines are F_{17} from the original cross. Pod color is fully equal to French Horticultural under our conditions.

NH #HR1 is early. NH #HR2 is in season with French Horticultural and both should be compared with this old standard variety.