

Bontoc, Mountain Province, was planted in late April along with Sanilac and Contender. The two U.S. varieties had stunted, yellowish plants and produced no pods at all. Only one type from Bontoc grew well and produced seed.

In 1970 P.I.'s with potential heat tolerance were requested and planted in April in comparison with the Bontoc bean selected in 1969. PI271997 and 271998, both from Spain, showed heat tolerance superior to the other PI's and comparable to the Philippine bean. All three have large white, kidney-shaped seeds. Seed on hand is limited in amount, but persons interested in evaluating heat tolerance may obtain a little seed of each variety from H. M. Munger, Department of Plant Breeding, Cornell University.

A STANDARDIZED SYSTEM FOR SURVEYING AND REPORTING
OF RACES OF BEAN RUST IS URGENTLY NEEDED

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Bean rust has received little attention compared with cereal rusts. The disease undoubtedly warrants more attention than it has received, and it probably will receive increasing attention in the future, especially in Latin America. Although it is essentially world wide in distribution, it is especially important in many Latin American countries because of the favorable environment for the disease and the importance of beans as a staple in the diet. Also, because beans and bean rust apparently originated in Latin America, both host and pathogen probably have more genetical variability in this area than elsewhere in the world.

It is not possible to tell how many separate races of bean rust have been identified because various workers have not used a uniform system of identification. However, well over 100 have been reported which cannot be relegated to synonymy on the basis of available information. This number represents relatively few surveys in only about 8 countries. On the basis of probability, extensive surveys, particularly in Latin America, should demonstrate the existence of a great many more races. Unless the results of different workers can be correlated, however, further surveys will do little to advance the knowledge of races of bean rust.

Some 30 years have elapsed since the first system was developed for identification of races of bean rust. Since then various workers have introduced their own modifications or system for identification of races. It is not surprising that, with experi-

ence, changes in the original system would be required. It is probably more surprising how well the original system has weathered use by various workers and in diverse geographic areas. The merit of the changes is not questioned, but there is need for a standardized system that all workers can use, so that their results can be related to the results of others.

Loeering and Browder (Plant Disease Reporter 55:718-722, 1971) have recently given a good review and discussion of systems for identification and designation of races in the cereal rusts and some of the problems involved in them. Although no one of these systems may be satisfactory for use with bean rust, some aspects of them may be applicable. In any case the experience of the cereal rust workers may be useful in developing a system of identification for races of bean rust.

It is proposed that a standard system for identification and designation of races of the bean rust organism should be developed by all interested workers (or by a committee of their choice) and that the system developed should be used for all surveying and reporting of races in the future. Furthermore, the mechanism should be established for periodic consideration and authorization of changes in this official system as the need for modifications arise. Perhaps the B I C can serve as a forum or clearing house for the expression of opinions by interested workers.

THE REGIONAL PULSE IMPROVEMENT PROJECT IN EGYPT

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Pulses (grain legumes) are a major source of protein available for direct human consumption in many developing countries. They provide a high quality protein to large segments of populations which cannot regularly afford animal protein or do not use them because of religious beliefs. Unfortunately, the levels of production are low because of inherent characteristics of the varieties grown, damage from diseases and pests, and poor cultural practices.

Research toward improvement of the pulse crops is essential because of the vital role these crops play in providing a reasonably balanced protein component for the primarily cereal-eating people.

The objectives of the Regional Pulse Improvement Project are:

- (1) Assembling a germplasm collection from Pulse producing countries of the world to be evaluated in a nursery field.