

SOYBEAN RESEARCH IN NORTH DAKOTA

The North Dakota Agricultural Experiment Station is cooperating with the U. S. Regional Soybean Laboratory of the U. S. Department of Agriculture. Headquarters for this cooperative research program on the breeding and selection of improved strains of soybeans adapted to the varying maturity conditions within the North Central States are located at Urbana, Illinois. Cooperative soybean nurseries using material derived from this research program are maintained by the Agronomy Department of the Station at Fargo and with the Walsh County Agricultural and Training School at Park River, North Dakota.

Mr. T. E. Stoa, Agronomist of the Station, is the technical collaborator who is in charge of this cooperative research within the State. He attended a conference of the technical collaborators at Urbana, Illinois, February 20-22, 1946. In presenting his report as a collaborator, Mr. Stoa said:

"Soybean production in North Dakota is not extensive and for the present does not exceed ten thousand acres. Most of this production is in the southeastern and eastern counties of the state, corresponding with our best corn growing area. It is the area of our State having the longest growing season, a fair supply of rainfall, from 18 to 22 inches, and where we can give most encouragement to the planting of the crop. Since we definitely are in a marginal area of production, any important expansion in our acreage is going to depend upon soybean prices in relation to other crops, also the development of varieties better suited to this area.

A relatively short growing season necessitates the use of early ripening varieties. Early varieties have a lower capacity for yield and usually lack in plant height for convenient harvesting. The number of early varieties to choose from are few. Until recently Minsoy was the principal early yellow variety. Minsoy lodges readily and lacks in height. Earlier varieties that stand up better and yield reasonably well have since become available and are now in fairly extensive production. In the order of earliness these are: Kabott, Goldsoy, and Early Mandarin. Flambeau tested the last three years in the Group O series, appears to offer some further promise over other varieties now in production. Some selections made from hybrid material, made available to us a few years ago by the Regional Soybean Laboratory, combine earliness, better height and from preliminary tests appear to yield satisfactorily. To date leaf spot diseases though usually present have not been particularly destructive in this area.

As indicated the future of soybean production in this area will be influenced greatly by the prices which soybeans bring on the market. North Dakota farmers are interested in soybeans as they are in other new crops that give a larger opportunity for crop diversification. The construction of a processing plant in connection with the State Mill and Terminal Elevator at Grand Forks, is expected to afford a more attractive and stable outlet for North Dakota beans, and for the livestock producers a more accessible source of soybean meal."