# MICHIGAN AGRICULTURAL COLLEGE EXPERIMENT STATION

## PRESS BULLETIN NO. 42

#### To the Editor:

readers. The notice below will be of value to many of your we, therefore, ask you to cooperate with us in calling attention to this timely matter.

## R. S. SHAW,

## Director.

#### The Bean Situation in Michigan

It is well known among Michigan bean growers that the crop now being harvested is much below the normal, both in yield and quality. The growth has in most cases been stunted; the plants have not podded heavily; and in spite of the fact that good seed was sown the continuous wet weather has caused the diseases to develop more seriously than at any time since Michigan began growing beans as a staple crop. Many fields have already been plowed under for seeding to wheat, and many fields are barely worth harvesting or will yield a very light crop. It is estimated from rather general observation about the State that the crop after being hand picked will not be more than 30 or 35 per cent. of normal and may be considerably less.

Michigan bean growers may not, however, appreciate the serious condition in regard to a suitable source of seed beans for the 1916 crop. In most cases the home-grown beans cannot be recommended for planting, but on account of the high market price of beans, there will no doubt be a tendency to plant badly diseased stock. The use of such seed will very materially reduce the yield and will greatly increase the percentage of cull beans. It is very mnch cheaper to buy good seed even at a price much above the market price rather than to grow a badly diseased crop and pay 5 to 7 cents a pound for picking out by hand the diseased beans.

The following suggestions may be of value in securing good seed: In regard to "northern grown seed," it may be said that some of the seed grown in northern Michigan has given very good results, producing a good crop, comparatively free from disease. Many of the beans in northern Michigan are badly diseased, even in a normal season, and there is always more or less uncertainty in buying seed from an unknown source. Many of the beans in northern Michigan were killed by frost in August so that this source of beans is quite limited this season.

In many sections of the State, there is occasionally a good field of beans-one which has produced a good crop and which shows very few disease spots on the pods. These should by all means be saved for seed. The local jobbers will in most cases be glad to assist in locating such fields. In many fields there are certain spots, usually the higher portions of the field, in which the beans are much better than the average in the field and which may be saved for seed. Plant or pod selection may also be practiced. It will be found that certain plants or pods are practically free from the diseased spots, and if these are selected and placed in clean sacks, an especially good grade of seed should be obtained. In making these selections attention should also be given to the vigor of plant, erectness, podding, maturity, etc. If obliged to purchase seed without an examination of the plants, seed should be selected which shows the smallest percentage of diseased beans in the unpicked sample. However, the beans should be very carefully hand picked before planting.

Bean growers should avoid growing beans too frequently in the rotation and should avoid putting bean pods or manure on the bean fields. It is suggested that so far as possible, a clover sod be plowed under for beans, and that the cultural conditions be as ideal as possible.

It is believed that if farmers follow the above suggestions and are favored with a good season, the 1916 crop will come back to normal.

EAST LANSING, MICHIGAN October 15, 1915 V. M. SHOESMITH, Professor of Farm Crops