

with a combine, if the beans are too low you are going to miss a lot of soybeans. Where they are only getting yields of possibly from 5 to 15 bushels, if they lost 5 bushels to the acre, it would be a pretty serious thing.

Another factor which may affect production on the prairies is the shattering of the seed. This is not of any practical importance in Ontario where we grow beans at the present time. Shattering of seed has reference to the splitting of the pod, thereby scattering the seeds abroad. That is the natural process in many legume crops; that is the way they propagate, by the pods splitting and throwing the seed out on the ground where it will grow and maintain the crop for the future. It is a natural process and we have to overcome it in order to avoid the loss of seed. Therefore, we have developed and selected varieties which do not have this tendency towards shattering. In Ontario we have practically no trouble at all with shattering. But when those same varieties are grown out in the prairie provinces, particularly in southern Manitoba and at Morden under the conditions there, with dry atmosphere, during the day and cool temperatures at night, it seems to bring about severe shattering of the seed. I know of cases where varieties have shattered as much as from 50 to 60 per cent of their seed. It happens immediately after the variety becomes mature. So if they are left standing for any length of time after they are matured—(we usually leave them because we want the moisture content down as low as we can get it)—you may lose from 25 to 50 per cent of the crop from shattering.

In the breeding work we are trying to overcome shattering habit and it will have to be given more attention in the west if the growing of this crop is to develop in western Canada.

I have listed the weed control problem. Those of you who have grown soybeans for some years will know what the weed problem is. It is something which at one time we thought would prevent the growing of soybeans in Canada.

Growers who put in this crop said that they absolutely could not cope with the weed problem. But as time went on, new methods were developed and that problem has been pretty well overcome. You can travel through western Ontario and see fields of soybeans, anywhere from 50 to 75 to 100 acres, and you will hardly see a weed in the fields of some of the growers in that area.

Many of these factors which I have mentioned are, of course, inter-related. They are being considered in the breeding programme, and every effort is being made to develop varieties adapted for production in any areas which may prove suitable to the growing of the soybean crop.

The CHAIRMAN: Now, Mr. Stanton.

*By Mr. Stanton:*

Q. Mr. Chairman, I am sure that we western members will not take up as much time on soybean growing as did our western cousins with their wheat problems; but we are interested in soybeans very much. I would like to have those figures of yield again. What width of rows are used in growing soybeans in Ontario?—A. It varies to some extent in Ontario. Soybeans are grown in rows from 14 inches up to about 28 inches apart. Some people grow them in wider rows, but that is the usual distance; and in this area we recommend 28 inch rows.

Q. In reference to the date for seeding in eastern Ontario, what date do you recommend?—A. It is pretty much like corn, any time from the 20th of May to the end of the month.

Q. When the weather has warmed up?—A. That is right.