

it enriches of this element a soil hitherto poor of same. Also, should we logically make it succeed to azote-exhausting crops, such as cereals.

Nevertheless, as the bean is a bettering plant, as it requires much dressing prior and during the vegetation, dressing that enables to clear the soil of noxious weeds, and as it is classed for this reason amongst the cleaning crops, some people take the stand that it should be grown before rather than after a cereal. In so doing, they say, cereals will at the same time benefit of a soil free of weeds and rich in azote; conditions indispensable to them.

Everything depends evidently on the composition and on the state of the soil, on the nature of the rotation practised and followed in the crops.

Being given, however, that farms in this Province are generally infested by weeds, that farmers very seldom plow up the stubble and that they are often short of labor and fertilizers, we would recommend to kill two birds with one stone; to have a bean crop after a potato, cabbage-turnip or beet crop and to have it followed by wheat or another cereal mixed with clover seed. That is, we believe, the best formula to obtain large yields from average crops, and to have the land retain its fertility (1).

### Fertilizers

The bean requires a soil sufficiently rich in organic matters or old manure, and this is just the reason why it should follow crops requiring an abundant manuring such as potatoes, beets, cabbage-turnips. If we were to act in this way, it could be grown without a new addition of fertilizers, as the soil would then contain a sufficient reserve of azote.

In case of the contrary, we will dung only with rotten manure, spreading from 6 to 7 tons per acre, and yet this rotten manure will have to be perfectly incorporated to the ground by means of a disk-harrow (2).

(1) This formula could make the following combinations possible:

#### *3 Year Rotation.*

1st year: Potato, or Cabbage-  
turnip or Beet  
2nd " Bean  
3rd " Wheat

#### *4 Year Rotation.*

1st year: Hoed crops.  
2nd " Bean.  
3rd " Cereal (mixed with  
clover and Timothy.)  
4th " Clover.

#### *5 Year Rotation.*

1st year: Hoed crops.  
2nd " Bean.  
3rd " Cereal (mixed with  
clover and Timothy.)  
4th " Meadow.  
5th " Pasture-land.

Rotations recommended in Ontario and the United States.

#### *3 Year Rotation*

1st year: Clover.  
2nd " Bean.  
3rd " Wheat.

#### *4 Year Rotation.*

1st year: Clover.  
2nd " Corn.  
3rd " Bean.  
4th " Wheat

(2) It is advisable to remind here that this addition of rotten manure would be suited only to light soils where it would have not only the effect of furnishing the bean with the quantity of azote it requires to come through the critical period, but also to contribute in maintaining in a soil usually dry, a certain dose of moisture.