

MANURES ON CEREALS, to show the Value of Nitrogen compared with Phosphates, or Potash, or both.

No. of Plot.	Kind of Manure.	Weight per Acre.	Remarks.
1	Nothing	...	Plots=2 acres each. The whole area was, more or less, attacked by small birds; the yield of each plot was therefore not taken. Plots Nos. 2, 7, 8, 10, and 11 were, however, decidedly the best. A second trial in case of a few plots was not more successful. Such experiments can only be carried out on plots in the middle of a large field of grain. These experiments were not continued last year, but will be again taken in hand.
2	Nitrate of soda	280 lb.	
3	Superphosphate of lime—25 per cent. soluble	336 „	
4	Kainit	300 „	
5	Ground bones	336 „	
6	Nothing	...	
7	Farmyard	15 loads	
8	Nitrate of soda	280 lb.	
	Superphosphate	336 „	
9	Kainit	300 „	
	Superphosphate	336 „	
10	Nitrate of soda	280 „	
	Bones	336 „	
11	Nitrate of soda	280 „	
	Superphosphate	336 „	
	Kainit	300 „	

ON ROOTS.—Plot experiments were not successful, a plant not always being obtained. In the field, trials have been several times made to test the value of special manures. In all cases the manured land yielded better crops than the unmanured, sometimes very much so, and in more than one instance made apparently the difference between a good crop and none: *i.e.*, the drills where no manure was used produced very few small turnips, whilst those adjacent, manured, produced a large crop.

Turnips are generally sown with the water-drill—about 600 gallons of water and 2 cwt. superphosphate of lime per acre. In no instance on the farm has a crop so drilled been a failure, or even a partial failure, whilst sowing turnip-seed broadcast has failed to produce a crop, even after three sowings. So far the water-drill seems to insure a plant, whilst in broadcast sowing everything depends upon the weather. The cost of manure, of water, and extra labour in drilling amounts to something less than 20s. per acre.