## 24. S. Robinson, Methyen, Mid-Canterbury.

Experiment No. 16/3/263. Variety of wheat: Marshall's, 105 lb. per acre. Date sown: 23rd May, 1929. Nitrate of soda applied: 17th September, 1929. Date harvested: 18th February, 1930. Date threshed: 11th March, 1930. Previous crops: 1928-29, wheat following grass. Soil: Silty loam.

Table 24.—Results of S. Robinson's Experiment.

Treatment per Acre.	Bushels per Acre.		1	27134144
	Yields.	Increase over No Manure.	Remarks.	Profit or Loss per Acre.
(1) No manure	20.5	1		
And a second sec	20.5		C::Ct :	1
(2) Super I cwt	21.5	1.0	Significant increase	is, loss.
(3) Super 2 cwt	21.7	1.2	Not significantly different from super 1 cwt.	6s. loss.
(4) Super I cwt., plus nitrate of soda I cwt.	29.8	9.3	Significant increase over super 1 cwt.	24s. 6d. profit.
(5) Super 2 cwt., plus nitrate of soda 1 cwt.	30.1	9.6	Significant increase over super 2 cwt.	20s. profit.
(6) Super plus lime 2 cwt.	21.5	1.0	Not significantly different from super 1 cwt.	3s. loss.

Comments on Table 24: Both super I cwt. and super 2 cwt. have increased the yield, but neither has proved paying. The addition of nitrate of soda has increased the yield by 8.3 and 8.4 bushels over super I cwt. and 2 cwt. respectively. Lime has had no effect on yield.

## 25. R. Campbell, Dromore, Mid-Canterbury.

Experiment No. 16/3/257. Variety of wheat: Solid-straw Tuscan, 90 lb. per acre. Date sown: 31st May, 1929. Nitrate of soda applied: 6th September, 1929. Date harvested: 3rd February, 1930. Date threshed: 28th February, 1930. Previous crops: 1928-29, oats; 1927-28, wheat following grass. Soil: Light loam with a few stones.

Table 25.—Results of R. Campbell's Experiment.

Treatment per Acre.	Bushels per Acre.			
	Yields.	Increase over No Manure.	Remarks,	Profit per Acre.
(1) No manure	19.2			
(2) Super I cwt	21.6	2.4	Significant increase	6s.
(3) Super 2 cwt	22.1	2.9	Not significantly different from super 1 cwt.	2s. 6d.
(4) Super I cwt., plus nitrate of soda I cwt.	28.3	9·I	Significant increase over super I cwt.	23s. 6d.
(5) Super 2 cwt., plus nitrate of soda I cwt.	28.4	9.2	Significant increase over super 2 cwt.	18s.
(6) Super plus lime 2 cwt.	21.4	2.2	Not significantly different from super 1 cwt.	3s.