

Samples of the same wheats were submitted to microscopic examination. About 60 per cent. of the grains were found to be injured, there being in the epidermis minute rifts or cracks—possibly caused by the drum, or smutter, of the threshing-machine. Twelve sound grains were sown, and all germinated; twelve unsound grains were sown, and eleven germinated; twelve unsound grains, pickled with sulphate of copper, were sown, and none germinated.

Similar experiments are now in hand; and also others to prove the efficacy of sulphate of copper in preventing smut, &c.: namely, In two fields smutty wheat has been drilled—(1) pickled with sulphate of copper; (2) pickled with sulphate of iron; (3) not pickled.

Thick and Thin Sowing.—Two fields have been experimented on in this direction, one chain of land being sown with wheat, the quantity per acre being $\frac{7}{8}$ bushel, 1 bushel, $1\frac{1}{4}$ bushels, and $1\frac{1}{2}$ bushels; variety of wheat, Hunter's white. The thickest sown was decidedly the best in both cases. The quality of the land has so much influence upon this question that experiments such as these have but little abstract value. The date of sowing and habit of growth of the variety of wheat sown must also be taken into account in deciding upon the quantity per acre to be sown.

Subsoiling, Deep and Shallow Ploughing, have been compared every year but one. The difference is hardly observable during the growth of the first crop, but the effect of deep cultivation is afterwards easily perceived in the improved mechanical condition of the soil and improved crops.

NEW VARIETIES OF WHEAT, 1881.

Variety.	Whence obtained.	Remarks.
American	Chicago	Said to be a picked sample of American winter wheat, but proved to be a mixture of several kinds of wheat, all of poor appearance.
White Lammas	Tasmania	These were wheats obtained from the Technological Museum, Melbourne, having been exhibited at the Melbourne Exhibition. They were all splendid samples, but, as soon as they came into ear, were attacked by birds and completely destroyed. Some of the seed, however, was left unsown, and is again under trial.
" Tuscan	Victoria	
Polish	N.S.W.	
Purple straw	Victoria	
Braemar velvet	Tasmania	
Wheat	Victoria	
"	"	
Cob	Tasmania	
Ten-rowed wheat	"	
Wheat	Victoria	
"	"	

Peas for Splitting.—The Early Emperor was tried on a few acres of land last year. The experiment will be continued.

Mustard—White and Brown.—Three acres tried last year with moderate success. Harvesting the latter presents a few difficulties in this climate, and in face of the small birds. Both crops may, I think, be profitably grown.

Wheats, 1882.—Besides the above-mentioned samples, I have been enabled, through the kindness of Mr. Lovegrove, of Makikibi, to sow a few acres with red wheats, brought from England this year by that gentleman. These wheats comprise Lammas, Nursery, Essex Rough Chaff, Talavera, and others.

Beans.—Tick and winter beans have been this autumn imported from England and sown. The tick bean especially will probably prove better suited to our medium land than the larger Scotch bean generally grown in this country.

The ordinary grain crops of the farm are not included in these lists.

Until students are more advanced, it is not practicable to undertake much experimental work in which the chemical laboratory is concerned.

Completion of the buildings and of the work of organizing a new institution will leave more time for attention to the development of useful experimental schemes.

School of Agriculture, Lincoln.

W. E. IVEY,
Director.

No. 6.

"Of the number of official visits made by the Board of Governors to inspect the College, the names of the Governors attending on each occasion, and the dates on which such visits were made."

No record has been kept of the official visits of the Governors to the farm, or the names of the Governors attending on each occasion.

F. G. STEDMAN,
Registrar, Canterbury College.