

PRAIRIE-GRASS AND LUCERNE.

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WITH the object of deciding the value of prairie-grass and lucerne as a temporary pasture in a crop rotation, an area of 6 acres at the Moumahaki Experimental Farm has been laid down to this mixture. The land previously carried a crop of vetches and rye-corn, which was cut and threshed for seed, after which the soil was ploughed.

In the autumn of last year the prairie-grass and lucerne was sown, 20 lb. of the former and 10 lb. of the latter being used. The crop came away well, and throughout the winter and early spring it provided splendid feed for store sheep and ewes and lambs. It was pastured till October, when it was closed for mowing. After developing a thick growth of about 2 ft. it was made into hay, the growth representing a weight of 10 tons of green material to the acre. The hay was an excellent sample. A fortnight after stacking was completed there was a heavy aftergrowth, which has been almost continuously grazed to the present time by dairy stock. Both sheep and cattle eat this mixture with avidity, and it is apparently admirably suited for fattening and milk-production. It has been noticeable that when the dairy cows were taken off this feed and put on to good pasture the milk-yield declined, notwithstanding that the pasturage was supplemented with ensilage carted out. After the prairie-grass and lucerne had been given a rest of several days in which to recover, the milk-flow rapidly increased on the cows being returned to field. This mixture is definitely a temporary crop, and should not be expected to last more than two years. At Moumahaki it has provided heavy feeding for six months, and should be good for at least another year. In addition to this, the heavy crop of hay was obtained. Though it is desirable to utilize the land for other purposes when the wealth of feed diminishes, the lucerne, of course, will continue to make growth if not disturbed. But the ploughing-in of the lucerne and prairie-grass will undoubtedly enrich the soil, and provide a good seed-bed for subsequent crops, and this with little manuring.

Extensive tests are being conducted at the Moumahaki Experimental Farm to determine the most suitable varieties of potatoes for the environment, their disease-resisting capacity, and their manurial requirements. Altogether sixty varieties are under trial. Several experiments are being conducted in regard to the effect of different specifics in warding off disease. All the potato plots are looking remarkably healthy.