

## WESTERN WOLTHS GRASS.

AT Ruakura three acres were sown with the above grass on the 14th May, 1912, and, although the winter was wet and some of the land in question naturally so, the first crop averaged 15 tons per acre of green forage. The grass was fit for cutting on the 7th October. It was carted out to horses and cattle (including milk cows), and it was relished by all the stock. The milking-cows maintained their flow of milk well while being fed on it. The second crop was allowed to ripen for seed, and has been reaped with the binder. Had this been required for green forage, it was available for that purpose on the 1st December, with an average weight of 12 tons per acre. Provided the weather is reasonably moist, a good third crop of green fodder should be available in a few weeks' time. The great drawback to this grass is that it removes so much fertility from the soil, and under New Zealand conditions its cultivation should be confined to strong soils. It is an annual. If sown in May it undoubtedly comes in at a time when there is often a scarcity of feed; but a crop of, say, oats and tares, or, say, barley and tares, could be available at the same time and would be better fodder and much better for the soil. Possibly the best use to which this grass can be put is to feed it off in its young stage with lambs or sheep, netting the paddock off in plots so as to allow the fed-off plots time to recover. The western wolth grows a much greater weight per acre than the ordinary Italian rye-grass.

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## LUCERNE.

SINCE cutting the plots on the 23rd October the rate of growth has been variable with the several varieties. Arabian and Peruvian outgrew all others during the first three weeks. Since then Hunter River and Colonial have gained on them, so that now Colonial is heaviest. American made greater growth during this month than in any previous month dating from sowing. Turkestan remains dwarf, resulting in the lightest crop. Plots testing what results can be obtained from single lucerne-plants have been laid off. In conjunction with these are tests to judge what benefits may be derived by using highly nitrogenous manures to lucerne and leguminous crops, also to compare soil-inoculation *versus* no inoculation *versus* stable manure. All the new strains of lucerne received were sown in these plots. Without exception the germination was over 90 per cent. Since appearing above ground the seedlings started away strongly, and a good stand of each new variety is assured.—A. W. Green, Overseer of Orchards and Gardens, Ruakura Farm of Instruction.