

## LUCERNE ON PUMICE SOIL.

THE photograph on the accompanying page illustrates the growth of lucerne on typical poor pumice country at the experimental plots of the Department at Lichfield, on the Rotorua line. The history of these plots was given in the *Journal* of last December. The larger sample illustrated shows the growth made between the 16th December and the 25th January of this season, or forty days. The lucerne was really ready for cutting in twenty-one days. The plot had been previously cut on the 16th December, and the lucerne made into hay. The smaller growth was from a plot sown on the 16th November, 1912, and the plants illustrated show two months' growth from seeding.

---

## RESIN AND SODA.

### SUMMER SPRAY FOR WOOLLY APHIS.

J. A. CAMPBELL.

IF left unchecked, the effects of a bad attack of woolly aphis during the summer are only too well known, causing as it does the destruction, or at least retarding the development, of the buds on the new growths and fruiting-wood of the tree; but when thoroughly checked during January or February the damage is considerably lessened.

The following spray, made of resin and soda, will do this very effectually, and, although not a new spray, it is one that, were it better known, I feel sure would be more generally used at this season.

Proportions: 5 lb. washing-soda, 5 lb. resin, and 40 gallons of water.

Preparation: Boil 2 gallons of water in a vessel of more than twice that capacity. In this dissolve 5 lb. of soda, then add 5 lb. of resin, and boil until the resin is dissolved, stirring well. As the mixture very readily foams over, it is necessary to have some cold water at hand to add from time to time, to prevent this. Continue to boil until all foaming ceases. Make up to 40 gallons. If used early in the summer this spray is apt to scorch, but it can be safely used from January onward.

---

The Japanese forage plant, polygonum, has been tried on all classes of stock at Ruakura Farm of Instruction, but in every case the animals refused to eat it. The experience was similar with the young shoots of helianthi.