

ANSWERS TO INQUIRIES.

IN order to ensure reply to questions, correspondents must give their name and address, not necessarily for publication, but as a guarantee of good faith. Letters should be addressed to the Editor.

FARMING-PRACTICE ON PUMICE LAND.

“SPARRING FOR KNOWLEDGE,” Rotorua :—

Is it good farming-practice on pumice soil of superior quality to burn off the fern and scrub, plough, and leave in that condition without a crop for twelve months or more? Would it be better to plough tall fern under and leave it to decompose, also without seeding? Is the basic slag at present on the market as efficacious as superphosphate on a pumiceous soil? In the Taupo district turnips can be grown on virgin land on the first furrow, with little cultivation. Here, on a much better soil, this cannot be done without first growing clover. Why the anomaly? What manure would bring about that much-desired result?

The Fields Division :—

If the scrub you refer to is mainly light manuka you are advised to burn it with the fern and plough without delay as deeply as the soil will allow. Disk, harrow, and roll well, with a Cambridge roller if possible. Work up a good seed-bed and sow turnips. This crop can be put in about November or December. When fed off, work up the soil and put down grass about October. Tall fern can be treated similarly. If the scrub is chiefly heavy manuka it should be cut and later burnt. If this is done by February surface-sow with the following mixture : 3 lb. Italian rye-grass, 5 lb. perennial rye-grass, 4 lb. Yorkshire fog, 6 lb. *Danthonia pilosa*, 2 lb. Chewings fescue, 1 lb. brown-top, 2 lb. crested dogtail, 1 lb. white clover; total, 24 lb. per acre. After a number of years the area can be ploughed, worked down, and sown in permanent pasture.

If you require fertilizers for top-dressing pasture a mixture of equal parts of superphosphate and basic slag gives good results on pumice soils. For sowing down pasture 2 cwt. to 3 cwt. of super is to be recommended. This dressing will give better results if the land has been limed. The slag on the market made by the Bessemer process is to be recommended. If you lime the soil, using 5 cwt. to 15 cwt. of ground limestone per acre, and use a mixture consisting of a good line of bonedust and super at the rate of 2 cwt. to 3 cwt. per acre, you should get satisfactory results on the first furrow with turnips. One part of blood-and-bone to two of super should be used. It must be remembered that pumice soils generally are deficient in nitrogen. A crop like turnips, following clover, will derive benefit from the humus added by the clover crop, which, apart from other benefits, supplies nitrogen. When clover precedes turnips it must be expected that the latter crop will benefit by the residue from the clover.

CASTRATION OF CALVES.

“CARDUUS,” Marton :—

Will you please inform me as to the best method of castrating bull calves, and the age at which it is done?

The Live-stock Division :—

Bull calves are generally castrated as soon as the testicles can be found in the scrotum, or purse. The method of castration is as follows: The calf is turned up in a sitting position and held there by an assistant. The operator then pulls the testicles down until the skin over them is stretched tightly. An incision is made at the lower end of the purse, over one testicle, which is then forced through the wound. The blood-vessels and the cord are then severed by scraping with the blunt part of the knife while still being stretched. This scraping prevents much bleeding. The second testicle is then removed in the same way, and a little carbolized oil applied to the wound, when the calf may be released.