

This season Mr. Jackson has made some 20 tons of excellent hay treated in the following manner: The iron and ammonium citrate (23 lb.) was dissolved in 8 gallons of water; when all dissolved 45 lb. of sugar was mixed in, and the whole was then mixed with 4 gallons of molasses. The liquid was sprayed on to the layers of hay by means of a Vermorel knapsack sprayer, and was sufficient for 15 tons of hay. The solution is absorbed and dries at once on the freshly made hay. Another method which is being tried on a smaller scale consists in merely sprinkling the solid scales of the iron compound on to the layers of hay without the addition of water, sugar, or molasses.

The writer considers that the outlook for the future of these iron-hungry lands was never more promising. To succeed in combating the trouble in a practicable manner at Mamaku, where the climate is severe in winter, argues for a much more favourable result in districts which are situated at lower elevations under less rigorous conditions. In this connection the Department would welcome assistance from farmers in demonstrating the effective use of iron ammonium citrate as a preventive and cure of iron-hunger, and for this purpose will supply at cost price (3s. 9d. per pound, postage free) a limited quantity of the drug. An amount of 1 lb. will be sufficient to drench for two months one cow, which should then, if the trouble is not too advanced, show an improvement.

TREATMENT OF COWS OF THE DAIRY HERD.

It was resolved that as certain cows which had been on the farm for two or three years (see April, 1924, *Journal*) were due to calve in winter—a most trying season at Mamaku—they should be given exceptional treatment in the shape of a change to the Tirau paddock. The cows thus treated were “Te Kuiti” (who was in good condition when she went to Tirau on 1st February, 1924), “Roanie” (also in good condition when she went there on 21st February), and “Ginger” (in very good condition when she went on the same date).

“Te Kuiti” came back from Tirau in first-rate condition on 8th May. She did well, and was springing on 30th June. She was then getting hay and turnips, and calved on 11th July; the strong, healthy bull calf was destroyed. At 31st July she was giving 18 lb. milk daily; condition good: 31st August, 22 lb. milk, being in good condition and getting hay and turnips: 7th September, 25 lb. milk; went to bull in good condition: 30th September, 25 lb.: 1st November, 27 lb.: 1st December, 22 lb.: 1st January, 1925, 17 lb.: 23rd February, 17 lb. milk; condition good.

“Roanie” came back from Tirau on 8th May, and on 13th gave birth to a dead calf, but was in good condition herself, milking well, and giving 20 lb. milk daily; 9th June, still giving 20 lb. and in good condition, getting hay and turnips, also 1 lb. molasses in a little chaff once a day; 30th June, still giving 20 lb., and treatment being continued; 1st August, molasses treatment discontinued, condition being good; 31st August, giving 2½ gallons milk, still getting hay and turnips; 6th September, all turnips finished, condition good, giving 26 lb.; 1st October, 23 lb.; 1st December, 20 lb.; 1st January, 16 lb., her condition being good throughout; at 23rd February was a little dull about the eye and hair rough, but animal in good condition; 12 lb. milk daily.

“Ginger” came back from Tirau looking well, but must have slipped her calf there. After getting hay and turnips she was sold for beef on 25th September as she was not in calf.

“Brindle” and “Cherry,” two cows, the former of which never had any exceptional treatment except molasses, are an outstanding