

Sod Seeding Cereals into Pasture for Winter Green Feed

LAST autumn several trials were laid down in Canterbury to investigate the suitability of sod-seeded cereals for providing increased winter green feed on dairy farms engaged in whole milk production. The interim results of these investigations up to the first grazing, which was carried out 10 weeks after seeding, have been sufficiently promising to justify a review of the relative merits of this new practice.

ONE trial was carried out on a pasture which was dominantly cocksfoot but which also contained perennial ryegrass and white and red clover. It had been severely affected by the drought. The heavy clay soil was hard and dry. Rain soon after seeding resulted in a good strike of the cereals and a good recovery of the pasture.

Another trial was sown in a two-year-old clover-dominant pasture. As the result of spray irrigating the pasture before seeding the drilling in of the seed was assisted and a good strike was gained. Some varieties were through the ground within 10 days.

The cereal varieties included were C.R.D. ryecorn, Wong barley, Cape barley, Arawa wheat, Russet oats, Algerian oats, and Winter Grey oats with Italian ryegrass for comparison.

All are being studied for productive-ness, recovery ability, freedom from disease, and palatability.

All treatments were drilled with a sod seeder, fertiliser and seed being sown together through the manure run.

The cereals were sown at the two rates of 2 bushels and 1 bushel per acre and the Italian ryegrass at 1 bushel and $\frac{1}{2}$ bushel per acre.

Two rates of fertiliser were also applied. The high rate was 3 cwt per acre of an ammonium-nitrate lime mixture and 1 cwt of superphosphate; the low rate was half of this.

Further investigative work dealing especially with fertiliser usage remains to be done, but from results so far a minimum quantity of 1 cwt of each of a phosphatic and nitrogenous fertiliser per acre is required to ensure rapid establishment of the crop.

Experience with varying seeding rates suggests that a seeding of from $2\frac{1}{2}$ to 3 bushels per acre will give satisfactory results. Observations indicate that high seeding rates tend to suppress the contribution by the grasses and clovers. The suppression of clovers may be desirable in some instances.

Of the cereals tested to date all except Algerian oats have thrown a good bulk of feed within 10 weeks of sowing, the erect types like Abundance, Russet, and Winter Grey oats and Arawa wheat doing particularly well in this respect. C.R.D. ryecorn and Wong and Cape barley are more prostrate in growth habit and require more careful grazing management. The first two can be relied on to give excellent recovery growth throughout the late winter-early spring period provided grazings are carried out when growth approximates 4 in. in height.

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Home Orchard in Summer

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Aphids on Currants

Currants are sometimes affected by aphids. The foliage, especially near the tips of branches, curls up and if the attack persists becomes pale. Growth is checked and the following summer's crop will suffer accordingly. Summer oil (2 fl. oz.) plus nicotine sulphate (1 teaspoon) to 1 gallon of water will control the aphids. The spray will require to be repeated about ten days later. Malathion or lindane sprays would also be effective.

Grass Grub

Grass grub may be controlled by applying $1\frac{1}{2}$ lb of 50 per cent DDT to 1,000 sq. yd.

Need for Water

All types of fruit are sensitive to a lack of moisture, especially in the weeks preceding maturity, when the fruit is swelling rapidly, and water should always be given before the ground becomes too dry and the plants begin to wilt. If the vegetable garden needs watering, the home orchard will need it too.

All photographs by Shell.

Dairy Produce Graded for Export

THE following figures showing quantities of dairy produce graded for export during July 1959 and for the 12 months ended 31 July 1959 with comparative figures for the same month and the 12 months of 1957-58 have been compiled by the Dairy Division of the Department of Agriculture from figures supplied by divisional officers at the various grading ports:

Period	BUTTER			Percentage Inc. or dec.
	Creamery (tons)	Whey (tons)	Total (tons)	
July 1959	2,807	4	2,811	—
July 1958	3,027	1	3,028	—
Increase or decrease	—220	+3	—217	—7.166
12 months ended 31/7/59	178,399	2,718	181,117	—
12 months ended 31/7/58	174,287	2,867	177,154	—
Increase or decrease	+4,112	—149	+3,963	+2.237

Butter in store at 31 July 1959 was 4,816 tons

Period	CHEESE			Percentage Inc. or dec.
	White (tons)	Coloured (tons)	Total (tons)	
July 1959	51	—	51	—
July 1958	102	—	102	—
Increase or decrease	—51	—	—51	—50.00
12 months ended 31/7/59	66,474	13,429	79,903	—
12 months ended 31/7/58	77,799	13,251	91,050	—
Increase or decrease	—11,325	+178	—11,147	—12.242

Cheese in store at 31 July 1959 was 6,486 tons

If these figures are converted into butterfat equivalent, there is an increase of 0.485 per cent in butterfat graded for the 12 months as compared with the preceding season. The above figures refer only to butter and cheese graded for export, and owing to diversions which may take place they are not necessarily a true indication of production trends.