

*Seed Trade.*—Owing to an active export demand for all lines on a short-supplied market, prices for all seeds firmed throughout the year. The 1944 harvest of rye-grass came on to an almost bare market, and with improving prices growers have been unwilling sellers. This fact, together with an extraordinarily strong overseas inquiry during the first quarter of this year, plus strong competition between exporters to cover export sales, led to fantastic ruling wholesale prices in the South Island not only for rye-grass, but also for the now apparently extinct cow-grass. North Island prices moved up more slowly, but at times f.o.b. South Island wholesale prices were higher than North Island retail prices.

*Seeds-purchasing.*—Although over 600 requisitions were completed, the total quantity of seed purchased did not equal that of pre-war years. The policy of exploiting quiet markets and taking advantage of uncertain holders in October–November resulted in substantial savings in expenditure.

*Wheat-moisture Testing.*—In conjunction with the Wheat Research Institute a moisture-testing service was operated in 1943 for the North Island wheat growers and brokers, which service was widely appreciated during a most difficult season. A total of 614 samples were received and reported on.

#### CHEMICAL LABORATORY

The analytical work of the Division has been handled in a satisfactory manner. A large number of samples were analysed, the main ones being: Fertilizers, 63 samples; serpentine-superphosphate, 22; limestones, 42; soils, 117; and pastures (dry-matter content), 450.

### DAIRY DIVISION

#### REPORT OF W. M. SINGLETON, DIRECTOR

Quantities of butter and cheese graded for export showed a further decline during the year under review. In terms of butterfat the decrease was 22,722 tons, or 16·80 per cent., from the 1942–43 figure, which in turn showed a decrease of 15,353 tons, or 10·25 per cent., over 1941–42.

Creamery butter received for grading for export during the year amounted to 94,972 tons and cheese to 85,100 tons, as compared with 110,542 tons butter and 109,955 tons cheese for the preceding twelve months, a decrease of 15,570 tons butter, or 14·08 per cent., and of 24,855 tons cheese, or 22·60 per cent.

It should be made clear that the figures used in this report are grading figures, not production figures, and, moreover, relate only to gradings for export. The percentage decrease in gradings should therefore not be interpreted as representing the true percentage decrease in production. The provision of dairy products for the Armed Forces over the past few years has considerably increased the quantities tabulated under the heading of local consumption, but these do not come within the scope of this report. On the other hand, this position would be offset to some extent by the rationing of butter for the local market to 8 oz. *per capita* per week as from the end of October, 1943.

While several factors have contributed to a decline in production, the principal cause was probably climate. In this regard we are in the unfortunate position, and one perhaps unparalleled in our dairying history, of having experienced the third unfavourable dairying season in succession. Moreover, the inimical effect of climate on the present season was accentuated by the shortage of feed during the winter of 1943, leading to some mortality among dairy cows and the poor wintering of stock generally, so that in many districts they commenced the new season in poorer condition than usual. Fortunately, however, weather in the late period of the season took a most favourable turn, with the result that the falling-off in production has been definitely retarded, and the final production figures for the dairying season are likely to be more favourable than was expected. The reduction in fertilizers and the continued shortage of farm labour are also factors which should be taken into account.

#### EXPORT VALUES

The total valuation, for Customs purposes, of all dairy-produce exported from the Dominion during the past financial year was £24,013,294, a decrease of £5,080,466 over the 1942–43 valuation of £29,093,760. Butter, cheese, casein, dried milk, milk sugar, and condensed milk and cream are included under this heading.

Taking butter and cheese separately, butter exported during the year was valued at £15,487,668 and cheese at £7,974,547.

#### CREAMERY BUTTER

The average grade of creamery butter graded for export during the year under review was 93·391 points, as compared with 93·173 points for 1942–43. Of the 94,972 tons received for grading, 79,457 tons, or 83·66 per cent., was classed as finest grade, 15,229 tons, or 16·03 per cent., as first grade, and 286 tons, or 0·30 per cent., as under first grade. The comparative percentages for 1942–43 were 77·87, 21·66, and 0·46, so that butter qualifying for the finest grade increased by 5·79 per cent., and only about 16·34 per cent. failed to reach finest class. Feed taint, which is confined principally to the Auckland Province, was experienced for a shorter period than usual.

*pH Testing of Butter.*—The number of tests made during the year at the various grading-stores were: Auckland, 1,417; New Plymouth, 856; Wanganui, 346; Wellington, 1,260; Lyttelton, 58; Bluff, 14; a total of 3,951. (The pH test is a test for discovering the addition of excessive neutralizer to cream).

Samples of butter submitted to bacteriological and chemical examination from the various grading stores numbered 4,034—Auckland, 1,286; Gisborne, 242; New Plymouth, 856; Wanganui, 310; Wellington, 1,176; Lyttelton, 164. The previous year's total was 2,714.