

are situated, and that the climate varies considerably throughout New Zealand, it is not at all surprising that a few of the results do not conform to the general rule. There appears, however, to be sufficient evidence to conclude that the small fluctuations which occur in the test from season to season are due to the rainfall and vary inversely with it, and that, with regard to rainfall, both amount of rainfall and number of rainy days must be given due consideration.

Table 21.—Variation in Annual Tests due to Nature of Season experienced. Total Friesian Data.

Season.	Average Mature Equivalent Test.	Variations from Mean Mature Equivalent Test.	Average Seasonal Rainfall for New Zealand.	Variations from Mean Seasonal Rainfall for New Zealand.	Average Number of Rainy Days per Season for New Zealand.	Variations from Mean Number of Rainy Days per Season for New Zealand.
			Inches.	Inches.		
1912-13 ..	3.52	0.00	42.35	- 1.20	155.0	+ 4.9
1913-14 ..	3.51	-0.01	45.09	+ 1.54	165.2	+15.1
1914-15 ..	3.56	+0.04	32.92	-10.63	133.2	-16.9
1915-16* ..	3.49	-0.03	41.08	- 2.47	142.9	- 7.2
1916-17 ..	3.51	-0.01	48.54	+ 4.99	149.5	- 0.6
1917-18* ..	3.58	+0.06	49.02	+ 5.47	161.4	+11.3
1918-19* ..	3.51	-0.01	39.52	- 4.03	144.9	- 5.2
1919-20 ..	3.59	+0.07	45.39	+ 1.84	140.6	- 9.5
1920-21 ..	3.55	+0.03	38.75	- 4.80	139.5	-10.6
1921-22 ..	3.45	-0.07	46.76	+ 3.21	154.2	+ 4.1
1922-23 ..	3.48	-0.04	49.67	+ 6.12	164.6	+14.5
Mean ..	3.52	±0.03	43.55	± 4.21	150.1	± 9.1

* Exceptions.

YEARLY VARIATIONS DUE TO CONDITION OF COW, FEEDING, ETC.

As mentioned in the two preceding articles, there are no data available from certificate-of-record testing with which to investigate for the effect of variations due to condition, feeding, &c., of the cow. It is considered that cows of approved dairy type commencing in good condition, and so maintained during test, would test higher than cows which commenced in poor condition or were poorly fed during the lactation period.

YEARLY VARIATIONS DUE TO AGE.

As the age advances after first calving, the annual test gradually decreases by small amounts for approximately ten lactation periods. About this stage it commences to rise slightly. Tests for the Jerseys and Friesians according to age are set out in Table 22. Figures for the Ayrshires and Milking Shorthorns are not included, for the reason that they were rather irregular, due to the numbers of records representing many of the ages being very few. The percentage total range of variation for the four breeds according to the grouping in the table is about 6 per cent. only, the respective percentages for the Jerseys and Friesians reading 5.8 and 3.7.