

GRASSES.

The average percentage purity and germination of the main grasses are shown in Table 3.

Rye-grasses.—The averages for perennial Italian and Western Wollths are all higher than those recorded for 1923, as was also the yield at harvest. In contrast to 1923 the demand for seed did not equal the supply, and consequently there has been in some districts a fair carry-over into 1925. Table 4 shows the average growth of perennial rye-grass by districts. Sandon is again disappointing, and the failure of the seed from this district to germinate satisfactorily is being investigated at this Station.

Cocksfoot.—Fair average quality characterized this seed. Danish generally is of a higher growth than New Zealand seed, the average shown in Table 4 being thrown out by a few very inferior lines. A reduction every year in the yields of Akaroa seed is followed naturally by an increase in the importation of Danish. This is a regrettable state of affairs, but is inevitable with the increase of dairying on Banks Peninsula. The more continuous grazing not only tends to lessen seed-production, but, given sufficient time, will alter the constituent character of these famous Cocksfoot pastures.

Timothy.—All imported seed of this species was of good quality.

Crested Dogstail.—The dogstail crop was of good average quality. Southern seed, however, did not hold its germination capacity very well abroad. This seed is famous for its colour, and English buyers are beginning to discover that colour is not always the most desirable characteristic of dogstail. A light colour usually denotes either immaturity or a forced ripening out of the head. Such seed rarely holds its growth for any great length of time, and shipment conditions probably tend to accentuate this feature. Southland growers would do well to leave the seed in stook a week or so longer, or, where practicable, delay cutting a few days.

Danthonia.—The quality was fair. A large number of very rough samples were received, some containing up to 60 per cent. of hair-grass, rye-grass, and inert matter (straws, &c.). There now appears to be a tendency to label this seed with the additional specific names *pilosa* or *semiannularis*, reserving the generic name for mixtures of the two species.

Brown-top.—The quality was irregular, ranging from extraordinarily poor to particularly good. Some of the samples did not contain sufficient filled seed to enable the standard germination test to be made. It is high time that the blower was put on to all brown-top. In this connection it is reported that some firms are dressing this seed up to its full weight for export. If the American trade is to be encouraged and retained a fancy grade of seed will have to be used for the purpose. In the dressed state brown-top is superficially the same in appearance as American red-top, and farmers when buying the cleaned seed should make sure it is New Zealand brown-top that is being offered to them. Determinations of *Agrostis* species are made gratis at this Station.

Chewings Fescue.—The samples received were of good average quality. This seed is important mainly from an export point of view, being now of little account in New Zealand pastures generally.