

have varying times of maximum growth, and since with the aid of irrigation the pasture can be maintained in good growing-condition through the entire irrigation season it is quite necessary that a mixture should be sown containing some early-, medium-, and late-growing varieties.

In Central Otago perennial rye-grass, *Poa pratensis*, alsike clover, and white clover grow exceptionally well, and every permanent pasture should certainly contain a proportion of these plants. For ordinary conditions such as exist generally in Central Otago the following mixture is likely to prove highly satisfactory: Perennial rye-grass, 14 lb.; cocksfoot, 6 lb.; timothy, 4 lb.; *Poa pratensis*, 2 lb.; alsike clover, 2 lb.; white clover, 1 lb.: total, 29 lb. per acre.



FIG. 59. AYRSHIRE AND RED POLL DAIRY CATTLE ON IRRIGATED GRASS PASTURE AT GALLOWAY IRRIGATION FARM, CENTRAL OTAGO.

Where a more simple mixture is required for sowing on rough sidelings the following can be used with satisfactory results: Perennial rye-grass, 16 lb.; cocksfoot, 6 lb.; alsike, 2 lb.: total, 24 lb. per acre.

Where it is intended only to sow down a temporary pasture under irrigation, with the idea of breaking it up at the expiry of the season following sowing, the following mixture is quite suitable: Italian rye-grass, 18 lb.; alsike, 4 lb.: total, 22 lb. per acre.

It is to be remembered that in these suggested mixtures the weights of seed given are not intended to be adhered to in every circumstance, but should act as a guide in regard to the proportions of different grasses and clovers to be used. Preference is given to the use of alsike rather than red clover in the mixtures on account of there being less likelihood of its causing bloat than the latter, and the fact that when autumn-sown it grows much better than red clover. Under Central