

quantities of seed and manure can be given. A heavy seeding often gives much poorer results than a light one, as the plants, being too close together, become stunted. In a loose seed-bed more seeds become buried and fail to germinate than in a well-consolidated one. Heavy land as a rule requires more seed than light.

Paspalum Farming.

There are many places where the system of crop rotation outlined is not applicable, the most typical example being the North Auckland peninsula, where on many farms the principal pasture grass is paspalum. On such farms (when situated on heavy flat land) the usual system of management is to allow the rank summer growth of grass to remain in the fields and to winter the cows on dry paspalum, with usually a run off on to hill country either in mixed grasses or danthonia or brown-top. The essential feature of this class of farming is understocking—gauging the carrying-capacity by the feed produced in the winter together with the old paspalum growth. When a paspalum field becomes sod-bound it is usually broken up in the autumn, fallowed in the winter, and in the spring sown in maize for grain. The high growth of paspalum and the dry maize are fed off in the winter and early spring. The field is then either left to go back to paspalum pasture or it is sown in rye-grass and cocksfoot in the autumn. Sometimes two or three crops of maize are taken. On the lighter soils and loamy clays the sod is sometimes broken up in the early autumn, and sown down to Italian rye-grass and red clover in March or April.

Such a method of farming is fairly satisfactory where the farmer has plenty of land and understocks; but calving must necessarily be late and the milking season shortened. As the land becomes more closely settled proper provision of feed for winter and early spring will have to be made to obtain adequate returns. The first step in this direction is the cutting of the excessive summer growth of paspalum for hay for winter and spring feed. By keeping the rank growth cut the maximum summer production of grasses is obtained, and the cows have always the fresh young feed to graze on. The next step is the systematic rejuvenation of paspalum fields with rye-grass mixtures, and the provision of a small area of mangolds for late winter and early spring use.

On farms in the North Auckland district in good cocksfoot, rye-grass, and clover pastures very little supplementary cropping is necessary if a specified area is devoted to paspalum. By keeping the paspalum low by grazing, or mowing if the growth is excessive, the grass does not spread to any extent, providing a close turf is maintained on the other pastures by chain harrowing and top-dressing. In most inland places 80 to 100 miles south of Auckland City, and in the coastal regions of the North Island generally, paspalum could also be utilized for part of the summer feeding.

Green Cereals, and Lucerne.

Cereals for winter feed: With an adequate supply of roots and hay, and temporary pastures of Italian rye-grass and red clover, green cereals for winter and early spring feed are not necessary. Under certain systems of cropping where swedes are the chief root crop,