

PEA GROWING IN WHEAT AREAS.

Possibilities of Future.

Mr. W. S. Kelly (Chairman of the South Australian Advisory Board of Agriculture) lecturing to the agricultural section, dilated on the possibilities in this State in connection with... wheat areas. Mr. Kelly, referring to the need for rotation crops...

OATS AND SHEEP.

By Mr. J. T. Pridham.

To the agricultural section, Mr. J. T. Pridham, Government Plant Breeder of New South Wales, lectured on oats and sheep. He stated that, in view of the fact that relatively high prices for sheep and wool were likely to continue...

...though Canada grew so much oats for export of wheat was much greater. The bulk of her oats went to feed live stock in the winter. To get the best results from a limited area they had to hand feed or graze cultivation paddocks, or do both.

WHEAT AND FALLOWING.

Advantage of Moisture Conservation.

The value of correct fallowing in connection with wheatgrowing formed the subject of an address by Professor J. W. Paterson, of Perth University to the agricultural section. In the course of his address Dr. Paterson made a strong plea for greater discernment in interpreting the benefits of fallowing.

...ample, he said that in 1923 the Western Australian wheat belt had too much rain early in the growing season, and yet the crops on fallow always appeared stronger and healthier than those on dry-ploughed land. It was not conceded that moisture conservation was unimportant.

In conclusion, the professor claimed that the gross benefit of fallowing was a composite result of various soil improvements effected by cultivation and rest. In no case would the improved yield be due solely to moisture conservation...

OATS AS FODDER.

Value of South Australian Fodders.

"Little attention has been given to the feeding value of fodders in Australia," Mr. A. T. Jefferis (State Agricultural Chemist) and Mr. C. S. Piper told members of the agricultural section. They added that at Roseworthy College in the last two years considerable work had been done in order to gain knowledge of crops profitable to grow in respect to quality as well as yield.

...more than double the amount in last season's oats hay. In common with other sorghums, sudan grass was poisonous when young, but only about one-third as bad as common sorghum. Analyses of the plant towards maturity showed the formation of hydrocyanic acid to be negligible.

Importance of Proteins.

Referring to food values in general as applicable to Australian conditions insufficient stress was laid on the importance of proteins. Early systems were based almost entirely on protein values. The present starch equivalent basis valued proteins at less than either fats or carbohydrates.

SOUTH-EASTERN SOILS.

Their Possible Correction.

The manner in which a possible correction of certain soils of the south-east of South Australia could be made, formed the subject of a lecture to the agricultural section by Professor L. J. Cook.

Professor Cook said that in that district a large proportion of the Kybybolite soils were cement ironstone loams, of approximately 1 ft. depth, over yellow clay sub-soil. The clay was very stiff, and its surface was very irregular, compared with that of the soil surface—hence the poor under drainage.

TRAINING AGRICULTURISTS.

Education Association Suggested.

In a paper prepared by Mr. W. J. Colebatch (director of the Roseworthy Agricultural College) and Mr. R. C. Scott, and read to the agricultural and forestry section, the writers stated that they had, in the Commonwealth, an ever increasing

being obtained, while with moderate rainfall wheat would yield 33 bushels for each inch of rain received during the growing period of the crop. Victorian wheat growers as a whole had obtained during the last few years only 1.1 bushels for each inch of winter rain, and the South Australian wheatgrowers 0.95 bushels per inch of winter rain.

Requirements Fluctuate. The water requirements of wheat were not constant, but fluctuated from season to season. High water requirements were associated with low rainfall, high temperature, strong winds, low atmospheric humidity and intense evaporation during October and November. In Victoria over 60 per cent. of the water required by a crop was used up in October and November, though the growing period extended over seven months.

Differing Requirements.

The varieties of wheat tested showed a wide variation in the transpiration ratio for grain. That was of great practical significance in the breeding of wheat varieties for arid districts. The proportion of grain to straw was a factor of importance in the creation of wheats for arid districts, for that determined whether the variety would utilize the scanty water supplies economically in the production of grain.

Tests made in Victoria showed that the transpiration ratio for wheat was lowest during the early stages, and progressively increased as the wheat approached the ripening stage. During the final stages the transpiration ratio was three to four times as high as that of the earlier stages. That emphasized the need of early maturing varieties in hot dry areas of the wheat belt, where the ripening period was excessively rapid.