

## AGRICULTURE

when the grain is up, depths of seeding, rates of seeding, dates of seeding, etc. A system of crop rotation is being worked out. The grain plots are one-fortieth of an acre in size. Special attention is given to seed selection. Banner oats and Marquis wheat are being grown under the rules of the Canadian Seed Growers' Association. Students in attendance at the school, and farmers in the district, can secure small quantities of Elite and First Generation seed. Corn and peas are being given special attention with the object of discovering a variety of each that will mature annually in southern Alberta.

Much attention is given to grasses, clovers and alfalfas, and so far results are encouraging. It has been demonstrated that alfalfa, white Dutch clover, sweet clovers and alsike do well in southern Alberta. Efforts are being made to obtain a satisfactory permanent grass mixture. Ten different varieties of potatoes, garden vegetables, purple top swedes and white turnips are being tested out. Trees have been planted to serve as wind breaks. Ornamental trees and shrubs of various kinds, annual and perennial flowers have also been started with encouraging results. A start has been made with small fruits: these will receive more attention when the wind breaks afford sufficient shelter.

*Olds.*—Experiments are in progress to ascertain the varieties of wheat, oats and barley that will grow most successfully in the district and also the best dates and rates for the seeding of grain. Cultural methods are being tried and attention is being paid to roots, especially turnips. With mangolds and sugar beets indifferent success has so far been experienced. Other work started has reference to gardening, the use of vegetables best adapted to the locality and the most suitable varieties of grasses and legumes. Alfalfa has been fairly successful both in broadcast plots and in rows. Amongst six or seven varieties of grasses, timothy, brome and western rye give good promise.

*Vermilion.*—The Vermilion School of Agriculture was established in 1913 for the training of farmers' sons and daughters in the principles of practical farming and housekeeping, and for conducting agricultural investigations. The school course is of two years' duration with five months each year. The experimental area consists of twenty acres divided as follows: campus, including buildings, driveways, lawns, trees, shrubs, five acres; experimental area for horticultural and agronomy plots, fifteen acres. On these plots experiments are being conducted in rotation, variety tests and cultural methods of crop production. The investigations began in 1914, and deal with questions that are more or less vital to the districts in central and eastern Alberta. Fairly elaborate experiments on crop management include trials of every common field and garden crop in Alberta under dates, rates, and methods of seeding and harvesting. Many varieties of fruits, shrubs and trees are being tried out in regard to their adaptability to soil and climate. Different varieties and strains of alfalfa, grasses and clovers are being investigated with the object of obtaining crops superior in hardiness and yielding qualities. A considerable amount of work in plant breeding is under way, head and plant selection with cereals, grasses, alfalfas and clovers being followed. Improvement work is in progress