## THE COMMERCIAL

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## Indian Head Experimental Farm Annual Report.

Last week the annual report of the Dominion government Experimental farm at Brandon was reviewed in these columns, and a few of the results of of the numerous experiments of last year given. The report of the farm at Indian Head is no less interesting in its way. Supt. MacKay's report is a very full one and is of special inter-

est to prairie farmers.

In the preamble to his report Supt. MacKay says the season, 1893, was one of bright promises and fair fulfil-The spring was backward and late frosts caused considerable loss to stockmen throughout the Territories. The loss from winds during the growing season was light compared with previous years. May and June were good growing meaths, but July was variable, and there were one or two narrow escapes from frost-something very unusual. Harvest came early, but was much interfered with by rain. Some of the farmers rushed stacking and thus escaped the worst of the rains, but many attempted to fol-low the practice of threshing from the stook and thereby suffered serious loss. Weeds were more numerous than usual, and the dangerous varieties are spreading in all directions though this danger is receiving more attention from farmers and municipalities than heretefore. Crops of grain did well on the farm, but hay and fruits were a poor crop. Trees grew vigorously.

Spring Wheat—Taking the experiments up in the order of their import-

ance, we come first to spring wheat. Forty-two varieties were tested. Early, medium and late sowings were among the test. The first plots were sown on the 16th of April, and six sucsown on the lath of April, and six suc-cessive sowings were made one week apart, the last plot being sown on the 21st of May. All those plots came up evenly and ripened, and were harv-

ested in the order sown. three seedings gave the highest yield and were much superior in quality to the later plots. The varieties used for this test were Red fyle and Stanley. A test of varieties on fields of one to six acres was made, and the superiority Red Fyfe as an all around good variety was again demonstrated. Hungarian, Preston, Wellman's Fife, Stanley, Percy, and several other varieties all did well. A test of varieties in one-tenth acre plots gave White Fyfc first place with a yield of 45 bushels and 30 pounds to the acre. The variotles known as Percy, Red Fyfe, Monarch and Stanley fol-lowed in the order named with thirtyseven others giving less promising re-Depth of seeding seems to have sults. considerable attention. inch deep gave the best results, but as the season was particularly favorable to that depth olds may not be taken as applicable to all years. The respective merits of press versus ace drilling were the subject of experiments and while there was very little real difference in the results, the former seems to have suited a little better. Bluestoning tests were made and the necessity of treating all seed with blucstone, whether smutty or not, was again demonstrated. For smutty seen one pound of bluestone to every six bushels of wheat was used and for clean seed one pound to ten bushels, dissolved in water in the proportion of two pails to the pound.

Fall Wheat-Nine varieties of fall wheat were sown in September, 1897. All these were above ground winter set in and came through the winter and spring safely. All made a rank growth and from the large heads formed gave promise of a very heavy yield. Rust, however, struck the straw when the heads were part-ially filled and caused a very light

yield of poor grain.

Onts-The oat crop was not so heavy as that of 1897, caused by spring frosts. The land sown to oats was all summer-fallowed in 1897. Tests of early, medium and late sowing were Banner and and Abundance varieties were used, and the sowings commenced on April 23 and continued at intervals of one week until the 28th of May. The first sowing of Banner yielded over SI bushels to the aere and was 122 days in maturing. while the first sowing of Abundance while the list sowing of Administrative yielded over 69 bushels to the acre and was 127 days in maturing. The plots sown May 7 and 14 gave the best results as regards yield, but the grain was not so heavy. In a four varieties of oats were In all sixty. and the best ten yields were obtained from the following: Buckbee's Illinois, Resedule, Columbus, Abyssinia, Early Maine, American Benuty, Buckbee's Illin-Maine, Amor-Marine, Amor-Improved Farl American, Oderbruch, and Early Blossom. Banner for នារាបប់ prevention Tests in outs revealed that for clean seed Bordeaux mixture or bluestone was a sufficient preventative, and for smutty ser'l formalin was a complete remedy.

Barley — The barley tests were mainly in early, medium and late sowing, and of varieties. The season was not a very favorable one for barley but some useful results were obtainbut some useful results were obtained. For the named test the sowings commenced on April 23 and continued at intervals of one week after that until May 28. Odessa, six-rowed, and Canadian Thorpe, two-rowed, were used. The plot sown on April 30 gave the best yield of Odessa, and that the best yield of Odessa and that sown on May 28th of Canadian Thorpo but the latter was lighter than some

of the earlier sowings. The test as regards Canadian Thorpe was not very satisfactory as the first two plots sown were blighted by a hot wind. In the test of varieties of barwind. In the test of varieties of bar-ley twenty-three kinds of six-rowed and eighteen of two-rowed were taken. Among the former Rennie's Improved gave the best results and among the latter Danish Chevalier. Bluestone gave the best results in the treatment of barley for smut.

Pease—In regard to sowing it was found that pease could be sown with good results up till practically the end of May. Forty-eight different varieties were tried, of which one known as Paragon proved to be the

Indian Corn—Twenty-five varieties were tested. The date of planting was May 16th. The plots were cut back by frost on the 27th. By Sepback by frost on the 27th. By September 27th the corn was cut, only one variety by that time reached the early milk stage. The product of early milk stage. The product of these tests was used as ensitage and fed to stock.

Flax—The experiments satisfactory, May frosts were not frosts interfering

with the growth.
Grasses—Awnless Brome Grass was the principal subject of experiment. The yield of this grass was found to be lighter than in previous years, partly on account of unfavorable

be lighter than in previous years, partly on account of unfavorable weather. The general results of the experiments with this grass are favorable to its use.

Potatoes — One hundred varieties were tested. These were planted on the 13th of May and dug on the 11th of October. The ten best varieties in point of yield were found to be, Poinris, Early Sunrise, Bovee, New Variety No. 1, Late Purltan, Everett, American Giant, Daisy, Brownell's Winner, Clarke's No. 1.

Roots—Nincteen varieties of turnips

Roots-Nineteen varieties of turnips were tested, in two seedings, May 14 and May 25. The early seeding was found to be best, Mangels, carrots, sugar beets, and various kinds of vegetables were also tested with yarying results. Of the sixteen varieties of carrots shown, Half-long White gave the best returns, yielding over 323 bushels to the acre. Several other kinds gave over 300 bushels return. The sugar beets sown, especially Danish Improved and Danish Red Top, did well, the latter yielding about 800 bushels to the acre of choice roots. Cabbage, citrons, cauliflower, cucum-bers, lettuce, melons, pumpkins were found to be capable or production more or less perfectly. Several varie-ties of onions and radishes were produced in good quality. Rhubarb and tomatoes were also successfully grown.

Flowers-These were largely experimented with and with splendid success in many cases.

Forest Trees—These made a most vigorous growth last year. Supt. Supt. Mackay thinks that the new growth will be found to have been injured by the frosts of last winter. Arboretum—The arboretum of

farm now contains no less than 230 varieties of trees and shrubs. Sixtyone of these were added in 1898.

Fruit Trees and Bushes-The season was very unfavorable for fruiting, but exceptionally good for growth. May frosts injured most of the blossoms. Black currents were completely destroyed by these frosts. Crab apple trees yielded fruit for the first time on the farm. Of a number of Pyrus trees planted in 1896 many are doing well. The seedling Pyrus planted at the farm are also doing well. Several varieties of plum trees