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Report 1918-20 With the Supplement to the Guide to the Experimental Plots Containing the Yields per Acre Etc.



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Notes on the Seasons

Rothamsted Research

Rothamsted Research (1921) *Notes on the Seasons ;* Report 1918-20 With The Supplement To The Guide To The Experimental Plots Containing The Yields Per Acre Etc., pp 60 - 62 - **DOI:** https://doi.org/10.23637/ERADOC-1-109

WINIFRED E. BRENCHLEY. " Weeds of Farm Land." Longmans, Green & Co., 1920. 41 Illustrations.

The book deals with the weed problem from both the practical and scientific standpoints. Attention is directed to the habits and characteristics of farm weeds, the methods of distribution, prevention and eradication, to the importance of the vitality of seeds when buried in the soil and to parasitic and poisonous weeds.

Separate chapters are devoted to the weeds of grass land and of arable land, and in the latter case the association of the weeds with various types of soil and crop is discussed. The uses of farm weeds and the popular and local names of the plants are collected together for the purpose of reference.

" The Rothamsted Memoirs on Agricultural Science."

The more important of the papers issued from Rothamsted are bound up periodically into volumes and sold from the laboratory. The following are now available :---

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CROP RESULTS.

SEASON, OCTOBER, 1917-SEPTEMBER, 1918.

The season that ended September 30th, 1917, had been bad for hay and corn, though favourable for roots and potatoes. There had been a drought through May and June, followed by a wet July and an unusually wet August, which greatly protracted the harvest. Fortunately, however, the weather improved in September and part of October, so that the land was in good condition for ploughing, and by dint of hiring extra teams, including two "Government " teams, we were able to overtake some of the arrears of work. November was exceptionally mild, but dull and fine, and by the 22nd the oats in Great Knott Field were well up, and the Broadbalk wheat was beginning to appear; the crops were much more forward than in the previous year. December was frosty and without snow, and the frost held over Christmas and the New Year; snow fell on January 16th but did not last; by February 18th the wheat, oats and clover had suffered, some of the plants had been killed and the survivors lacked vigour. Early in March the weather turned very cold, but afterwards it was wonderfully fine, and by the 20th the ground was dry and in beautiful condition for seeding and cleaning, so that hand-hoeing was done both in Broadbalk and in Long Hoos, where grass was growing among the wheat. The corn and clover all began to improve. On Sunday, March 24th, 1918, at 2 a.m., the clocks were put forward an hour to "summer time." In 1916 and 1917 the farm workers had declined to observe the change and continued to work by sun time, but this year they decided to adopt it now and henceforward. After the beginning of April the dry period was over; the barley and seeds mixture were safely in, but the potato land was not ready. On April 20th and 21st there fell snow and much rain, so that there was a great deal of water on the land and the Broadbalk drains were all running. February and March had been drier than the average, but April made up the deficit. Wireworm appeared in Long Hoos wheat and some eelworm in the Great Knott oats.

May was very fine. The winter oats were short in straw and rather backward. The grass also was short. On the other hand, the wheat was looking well, especially in Little Hoos after clover. Long Hoos wheat also looked much better than last year : there was some charlock in the west end, otherwise the field was tolerably clean. The root land was still not prepared by the end of May. June was dry, with sunny days but cold nights;. the pastures and meadows seemed unusually thick with buttercups and dandelions, perhaps because the grass was so short; later on thistles gave trouble : temporary grass, on the other hand, was longer and the clover was excellent. The drought continued till July 9th, ruining the new sown seeds and also the swedes (which were finally finished off by the "fly "), and making barley very short. On the other hand, the wheat was long in straw (5ft.) so also were the oats. King Edward potatoes suffered. Turnips were sown after the swedes, but failed.

At the end of July, Harpenden Field was ploughed by Government tractor and cleaned in preparation for oats. August was beautifully fine, hot and dry, and the harvest came in in record time. Much of the wheat was never stooked but was carried as it lay : some farmers indeed cut and carted on the same day, but we preferred not. September was wetter (4.8in.) and while this improved the mangolds it interfered with the lifting of the potatoes.

The harvest returns showed that wheat had been unusually good (5 qrs. per acre Red Standard; 4 qrs. Red Marvel). Potatoes had been only moderate (5 tons), mangolds poor and swedes failed.

OCTOBER, 1918-SEPTEMBER, 1919.

On September 29th no less than 1.3in. of rain fell, and this, coming at the end of a spell of wet weather, left the ground very wet. Rain fell almost daily in October and November, although the total was below the average. Its persistence, however, and shortage of labour interfered with ploughing, but, owing to the early harvest, work was fairly forward : by the time the Armistice was signed (Nov. 11th) oats and the first sown wheat were well up. Throughout November and December the weather continued mild and muggy, and the carting of mangolds was wet, dirty work. January was wet, impeding alike the ploughing and threshing; on the 28th came snow, which lay 9¹/₄ inches on the ground and then froze : the weather remained cold for some time. Then followed much rain till March 7th. The winter corn suffered and came out a bad colour after the snow, and the wheat contained some grass; clover, however, was looking well. Long Hoos had been intended for roots, being weedy, but owing to labour shortage half was put into barley, and our acreage of potatoes was cut down from 13 to 4.

There were frequent frosts in April and on the 29th a snow storm with Hin. of snow in the open; this, however, soon went. May was a magnificently fine month, with long sunny days and good dews at night; the total rainfall was only 0.46in. The hot weather continued till the end of June, parching the meadows and greatly retarding the potatoes. Currants, gooseberries and peas were full of blossom. Oats and early sown wheat and Stackyard barley looked well, but the late sown wheat and New Zealand barley were thin and full of thistles. Long Hoos barley was also weedy. July was a bad month; it was very cold and sunless and towards the end the corn showed signs of lodging, although there was no great length of straw. The local term for the condition of the wheat and barley was " scrawly," *i.e.*, many individual straws lodged, though the bulk stood: this is a common result of thin or uneven growth. The winter oats only were actually " lodged." The roots showed signs of picking up, but the second cut of clover was disappointing. The early part of August was hot; harvest began well, and although crops were light they were quickly brought in on our farm (though many others were less fortunate). Having now our own tractor, we pushed on well with the ploughing immediately the corn was cut; by September 8th we had ploughed Harpenden, Sawpit, Foster's, West Barnfield and part of Broadbalk fields. August and September were delightful months. A spell of wet weather lasting from August 25th to Sept. 5th rather delayed the carting, but it facilitated cultivation, cleaning and early sowing. Owing to the spring drought much of the seeds failed : only the clover sown in spring wheat in Great Knott Field survived. This was a great season for Daddy Longlegs. The differences on the experimental mangold plots showed up very well this year, though the yields were distinctly poor. When the corn was threshed out the yields were not unsatisfactory. Many farmers in the locality estimated their yields at 20 bush. of wheat, 22 of barley and 26 of oats only; ours were 34 bush. of wheat in two cases, but 20 only in the third. Oats, following clover, yielded 62 bushels. Potatoes improved considerably during the later part of the season, but finally yielded only 54 tons per acre. Taking it altogether the season was a bad one and it ended badly : hay and roots had both proved disappointing.

OCTOBER, 1919-SEPTEMBER, 1920.

This season began in the extraordinary position that much of ploughing was already nearly completed, consequently thecross-ploughing and cultivations were carried out. The weather was remarkably suitable for cultivations : throughout October it was sunny by day and frosty by night, and the rainfall was only 1.0in. instead of 3.2in., the average. During the war years the fields had become foul : during this autumn we did much cleaning. On October 20th, Great Harpenden was drilled easily in spite of the drought : on October 23rd, New Zealand was drilled, but with more difficulty, the clods being not well broken. On October 24th, however, rain came, Stackyard and Broadbalk were, therefore, drilled easily. The oats in Sawpit were looking well, but nothing was yet showing in West Barnfield. By October 31st we had sown all our winter corn, excepting only 8 acres after mangolds and roots not yet lifted. The autumn tints were remarkably fine : this was popularly attributed to the dryness. November was very cold : the first snow came on the 11th.

In spite of the early sowing the wheat was late in starting, and it did not show in Harpenden Field till November 24th, a month after seeding : New Zealand, Stackyard and Broadbalk were not yet showing. December was milder and wet (5.3in. instead of 2.5in.), and it was not till the 18th that the bullocks were taken in : January was somewhat mild, the winter corn had strengthened considerably but was not too forward; February was also mild and March had some very warm days. February was