

"Sunday last witnessed the close of another Thames trout fishing season. Considering the unfavourable condition of both water and weather results have turned out better than was expected. One hundred and twenty-seven trout are known to have been caught between Teddington and Wallingford, and these scaled 532 lb. 12 oz., and averaged 4 lb. 3 oz. a piece.

"Mr. G. Witherington took the heaviest fish of the season—one of 10½ lb. It was landed late one evening in May at Sonning."

EXTRACTS FROM PROF. ROBERTSON'S

Evidence

ON CROP-GROWING.

"The variety *Harrison's Glory* (59 bushels per acre) which headed the list for productiveness at Brandon, Man., gave the lowest yield of all the varieties tested at Agassiz, B.C., (22 bushels per acre); and the variety, *Creeper*, (23 bushels per acre) which was at the very foot of the list of all the varieties tested at Brandon, Man., was included in the list of the twelve highest at Indian Head, N.W.T., (43 bushels per acre). These are only instances, and the evidence of the whole of the lists is in the same direction.

It is the most convincing evidence I find anywhere that the variety, in regard to productiveness, varies with the locality where it is grown, or varies in degree as it happens to hit the conditions of the locality, or as it adapts itself to them. Could anything be more convincing?

VARIETIES OF OATS AND BARLEY.

An examination of the records of the tests of varieties of oats gives similar results to those of pease and wheat. Out of the 65 varieties grown at the five Experimental Farms in 1898, no less than 41 varieties appear in the five lists of the twelve most productive varieties. The variety *Danish Island* (42 bushels per acre) which yielded lowest at Ottawa was the very highest at Agassiz, B.B. (85 bushels per acre). The tests of six-rowed and two-rowed barley point in the same direction. There is nothing to indicate a variety which is sure to be the most productive, or even likely to be the most productive, in any locality without an actual trial of it there; and if it happens to hit the conditions aright, its superior productiveness can be maintained only by selection

of the best seeds of it for sowing from year to year. Selection and sowing of the heaviest and largest seeds of any variety, from the crop on the piece of land where it has given the largest yield, will increase its productiveness from year to year in that locality.

DOES SEED RUN OUT?

"That brings me to say a few words on the subject of whether a strain of seed, or a variety, will deteriorate in productiveness by being grown on the same farm from year to year. I submit some further evidence from the report of the Experimental Farm of Guelph, Ont. If the different varieties of grain grown on that farm continuously for eight or ten years have deteriorated in productiveness, then there should be some evidence in a gradual decrease in the yield, independently of the fluctuations due to the season. On the contrary, the records of yields show that there is a progressive increase in the yield per acre of the varieties which have been grown for the longest periods on the same farm. There are variations and slight exceptions to that, but that is the rule as shown by the records of yields.

LARGE AND SMALL POTATOES.

Before I finish, let me say one word about potatoes. Mr. Zavitz carried on an experiment in using large marketable potatoes and small potatoes (not very small—1½ inches in diameter) for planting. He has done that for four years. The large potatoes for planting every year are selected from the produce of large potatoes planted the previous year. The small potatoes are from the produce of small potatoes. The average yield for the four years 1895-96-97-98 was 201 bushels per acre from the large potatoes and 131 bushels per acre from the small potatoes. That was a gain of over 69 bushels to the acre annually, on the same soil, in the same seasons, for four years, from planting large potatoes. This was due probably to some extent to the inherited vigour, and also to the larger amount of nourishment for the young plant in the larger potatoes planted."

Thoroughbred males.—We really thought that the desire to employ half-bred stallions, bulls, etc., had vanished, even among the most unenlightened farmers of this province; but it appears, from a paragraph in the JOURNAL D'AGRICULTURE