

RATE OF SEED PER ACRE WITH BARLEY.

In this experiment four $\frac{1}{4}$ -acre plots were seeded to Two-rowed Chevallier barley at the rate of $\frac{1}{4}$, 1, $1\frac{1}{4}$, and $1\frac{1}{2}$ bushels per acre respectively. All plots were seeded on the same day and all were cut on the same day. The tabulated results are as follows:—

Table 21.—Results of Rate Seeding with Two-rowed Chevallier Barley.

Variety.	Date seeded.	Rate of Seed per Acre.	Date headed out.	Date cut.	Days to mature.	Size of Plot.	Yield per Plot.	Yield per Acre.
		Lb.				Acre.	Lb.	Bu. lb.
Two-rowed Chevallier	April 23	36	July 19	Aug. 26	125	$\frac{1}{4}$	182	75 40
"	" 23	48	" 19	" 26	125	$\frac{1}{4}$	874	72 40
"	" 23	60	" 19	" 26	125	$\frac{1}{4}$	784	65 16
"	" 23	72	" 19	" 26	125	$\frac{1}{4}$	887	70 44

The results as given above show that all rates of seedling gave excellent results, and while the 72 lb. or $1\frac{1}{2}$ bushels to the acre gave slightly the best results, yet it is not so very much greater than that obtained from the 36-lb. or $\frac{1}{4}$ -bushel seedling. Just why the 60-lb. seedling should give the poorest results is hard to explain. However, this particular plot is only slightly below the rest, and as all the results may be regarded as very good, we are therefore unable to draw any definite conclusions from the above. This experiment stands in the same position as do some others where it is impossible to deduce definite results from the first year's work. It will require the results of a series of years to give records that may be regarded as authentic and dependable. It is interesting to note the results of the above experiment in comparison with the one that follows. In both experiments our own home-grown seed was used. It will be noted that the experiment as given under Table 21 was seeded on April 23rd, while the first plot to be seeded in the following experiment was seeded two weeks later, or on May 7th. The three other plots in the following experiment were seeded respectively on May 15th, 22nd, and 29th, or at intervals of one week. The point to be noted here, however, is the fact that the earlier seedling (April 23rd) has given very much better results than any of the subsequent seedlings.

DATE OF SEEDING WITH TWO-ROWED CHEVALLIER BARLEY.

In this test four $\frac{1}{4}$ -acre plots were used and each was seeded at the rate of 60 lb. or $1\frac{1}{4}$ bushels per acre. As noted above, the four plots were seeded one each on May 7th, 15th, 22nd, and 29th, or just seven days apart.

Table 22.—Results of Date of Seeding Two-rowed Chevallier Barley.

Variety.	Date seeded.	Rate of Seed per Acre.	Date headed out.	Date cut.	Days to mature.	Size of Plot.	Yield per Plot.	Yield per Acre.
		Lb.				Acre.	Lb.	Bu. lb.
Two-rowed Chevallier	May 7	60	July 29	Sept. 11	127	$\frac{1}{4}$	780	65 4
"	" 15	60	" 31	" 11	119	$\frac{1}{4}$	679	56 28
"	" 22	60	Aug. 2	" 11	112	$\frac{1}{4}$	618	50 48
"	" 29	60	" 1	" 11	103	$\frac{1}{4}$	792	66 0

It will be noted that the later the seedling the quicker the plots head out, and also the shorter time required to mature. For instance, there are seven days difference in the date of seeding of the May 7th and 15th plots, but there are only two days difference at the time of heading out, and at the time of ripening the May 15th plot had matured in eight days less time than the May 7th plot. If comparison is made of the seedlings of May 15th and 22nd and those of May 22nd and 29th in the same manner, it will be found that the above facts may be applied more or less regularly throughout. It must, however, be borne in mind that a very short