

The list of six-rowed barleys includes fifteen of the new hybrid sorts which have been produced at the experimental farms. The following are the names and parentage of these new six-rowed forms :—

1. Royal—Swedish (two-rowed)	Female	Baxter's (six-rowed)	Male
2. Trooper—Swedish (two-rowed)	do	Baxter's (six-rowed)	do
3. Summit—Swedish (two-rowed)	do	Baxter's (six-rowed)	do
4. Phenix—Baxter's (six-rowed)	do	Two-rowed (name lost)	do
5. Pioneer—Swedish (two-rowed)	do	Baxter's (six-rowed)	do
6. Stella—Swedish (two-rowed)	do	Baxter's (six-rowed)	do
7. Mansfield—Duck-bill (two-rowed)	do	Rennie's Imp. (six-rowed)	do
8. Nugent—Swedish (two-rowed)	do	Baxter's (six-rowed)	do
9. Yale—Duck-bill (two-rowed)	do	Rennie's Imp. (six-rowed)	do
10. Albert—(Four-rowed)	do	Can. Thorpe (two-rowed)	do
11. Brome—Rennie's Impd. (six-rowed)	do	Duck-bill (two-rowed)	do
12. Empire—Rennie's Impd. (six-rowed)	do	Duck-bill (two-rowed)	do
13. Claude—Duck-bill (two-rowed)	do	Common (six-rowed)	do
14. Garfield—Baxter's (six-rowed)	do	Duck-bill (two-rowed)	do
15. Argyle—Baxter's (six-rowed)	do	Duck-bill (two-rowed)	do

Nos. 1, 2, 3, 4, 5, 6 and 8, were the results of experiments carried on at the Central Farm by the Director and have nearly all been produced from sports from one cross, which have been carefully watched and selected by Mr. W. T. Macoun, and all sports not true to the type rejected. From Mr. Macoun's experiments at the Central Farm, Nos. 10, 14 and 15 have been produced, while Nos. 7, 9, 11 and 12 were originated at the branch farm at Agassiz by the experiments of Dr. A. P. Saunders, and No. 13 by Mr. Thos. A. Sharpe, also at Agassiz.

FIELD CROPS OF SIX-ROWED BARLEY.

Odessa.— $\frac{3}{4}$ acre. This was adjoining Canadian Thorpe, but on somewhat better land; the manuring and treatment were the same. Sown 5th May; $1\frac{3}{4}$ bushels per acre; came up 11th May, and was ripe 27th July. The time to mature was 83 days. Yield per acre 72 bushels 13 lbs.; weight per bushel, $50\frac{1}{2}$ lbs. Length of head, $2\frac{1}{2}$ to $3\frac{1}{4}$ inches; six-rowed, length of straw, 33 to 38 inches; all standing well; growth medium and fairly even, some smut but very little rust.

The following nine varieties were sown on one-acre plots adjoining each other. The land is clay loam for the first four plots, uniform in character, the next two plots are partly clay and partly sandy loam, and the remaining three are soil of much poorer quality, partly clay and partly peaty. This variation in quality is the chief cause of the lesser yields in the last named plots. This land was manured in the autumn of 1894 with about 18 tons of barn-yard manure per acre; the crop for 1895 was wheat. It was ploughed in 1895 with the gang-plough lightly, to cover weeds and start shed grain, immediately after harvest and ploughed late in the autumn about 8 inches deep. In the spring of 1896 it was gang-ploughed and harrowed with the smoothing harrow, before sowing.

Trooper.—1 acre. Sown 4th May; $1\frac{3}{4}$ bushels per acre, came up 11th May, and was ripe 27th July. The time to mature was 84 days. Yield per acre, 40 bushels 27 lbs.; weight per bushel, $51\frac{1}{4}$ lbs. Length of head, $2\frac{1}{2}$ to $3\frac{1}{4}$ inches, six-rowed, length of straw, 32 to 36 inches; all standing well; growth medium and even; some smut, but no rust.

Royal.—1 acre. Sown 4th May, $1\frac{3}{4}$ bushels per acre, came up 11th May, and was ripe 24th July. The time to mature was 81 days. Yield per acre, 50 bushels 45 lbs.; weight per bushel, 53 lbs. Length of head, $2\frac{3}{4}$ to $3\frac{1}{2}$ inches, six-rowed, length of straw, 33 to 36 inches; all standing well, growth medium and even, some smut, but no rust.