Rate and Date of Seeding Starc I Rye

Over a period of many years there was available to Central Oregon dryland ranchers a variety of rye known solely as "Central Oregon common" rye. This rye was grown on the dry land for hay. Eventually, with named varieties and certification, the word common took on a different meaning and any seed that couldn't meet certification standards for one reason or another was called common rye. As a result, the "Central Oregon Common Rye" was all but lost as a variety for local ranchers.

The old variety was reasonably productive as a hay in the area and, more important, it could be seeded either in the fall or spring in Central Oregon.

In an effort to satisfy a need, a local seed company sought out sources of seed of the old "common" rye. Several sources were found and grown out and the one that more nearly met the description of the old variety has been designated as Starc I.

The station was asked to grow out the variety to determine whether it could be grown as a winter or spring variety. In response to the request, a date and rate of seeding was established under irrigation to obtain an answer to the problem.

Table 9 shows the results of the seedings made from December 17, 1973 through May 15, 1974. The variety did not fail to make seed heads at any date of seeding and, in that respect, would have to be considered at least a winter-hardy spring barley.

There was a considerable amount of variation in all the agronomic characters studied. This may have been due to the stages of growth at the time of individual frosts or irrigations. In general, the results indicate that the earlier the rye is seeded, the greater grain and hay yields, plant height, lodging and tillering. The hay yield held up better in the late seeding date at the 120#/acre seeding rate than the 60# rate. Lodging was also greater at the heavy seeding rate even though plant height was greater at the lower seeding rate.

There was a rather heavy infection of ergot in the seeding but no notes were taken on the effect of time or rate of seeding.

Table 9 The effect of seeding date and seeding rate on the yield and selected agronomic characteristics of Starc I rye.

Seeding date	Yield grain bu/A	Air dry forage tons/A	Bu wt	Plant ht in	Lodg %	Ave tiller count
		60# Seeding	rate			
12-17-73 02-15-74 02-28-74 03-15-74 03-30-74 04-15-74 04-30-74 05-15-74	43.04 43.50 37.10 31.63 37.80 36.92 23.03 16.20	4.94 6.37 5.41 5.30 5.52 4.80 4.05 2.52	52.5 53.0 52.5 53.0 53.5 53.5 53.5 52.5	48 48 50 41 48 49 46 45	60 30 25 80 40 15 5 20	136 117 131 125 92 111 59 55
Ave 60# Rate	33.65	4.86	52.9	47	34.4	103
	5	120# Seeding	Rate			
12-17-73 02-15-74 02-28-74 03-15-74 03-30-74 04-15-74 04-30-74 05-15-74	42.91 37.10 39.46 30.97 31.22 41.32 28.82 24.96	5.65 5.79 5.86 4.84 5.24 5.41 4.09 3.41	52.5 53.0 52.5 52.5 53.0 53.5 53.5 53.5	43 44 46 44 45 46 45 -	90 75 60 60 30 15 5	162 135 99 120 119 69 55
Ave 120# Rate	34.60	5.04	52.9	45	48	108

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	Yield ⁽¹⁾				~ •	E of
Seeding date	bu/a	Multiple	range	signi	ficance	5%
December 18 February 15 April 15 February 28 March 30 March 15 April 30 May 15	43.11 40.39 39.03 38.35 34.49 31.31 25.87 20.65	-				

Table 9a. Duncan's new multiple range test at 5% level for seeding dates of Starc I rye.

(1) Average of the two seeding rates.