

The different varieties are always sown on a field in which the soil is very uniform. To prevent mixing they are all sown on summer-fallow. Of the four named varieties of wheat tested this year the Marquis again yielded highest. The Red Fife was very light because it was quite immature when the frost came. The Prelude again matured earliest taking 23 days less than Red Fife. The table below gives the results of this year.

Variety.	Days Maturing.	Yield.
Marquis.....	116	Bus. Lbs. 54
Red Fife.....	122	46-40
Pioneer.....	113	46-40
Prelude.....	99	31-40

WINTER WHEAT.

A small plot of winter wheat was sown on September 6, 1913, and was ripe on August 3, 1914. The yield per acre, however, was very unsatisfactory because a large portion of it winter killed.

WINTER RYE.

The winter rye was sown on September 5, 1913, and was ripe on July 25, 1914. Where this crop was sown on summer-fallow a good yield was obtained but the portion sown on stubble land was very poor.

OATS.

The young oat plants are much more tender than spring wheat and are, therefore, very easily destroyed by the spring frost. For this reason oats are never sown at Indian Head until after the danger of severe frost is past. This season the variety plots were sown on May 11. With oats the quantity of seed per acre depends on the vitality of the seed and the type of the oat. Oats of a large stooling type that test 80 per cent or over are sown two bushels per acre, while oats that test less or are poorer stooling types are sown heavier.

While smut does not affect the quality of oats as it does wheat it causes a lighter yield. Therefore, at this station the seed is always treated with formaldehyde, similarly to wheat.

The soil on which the plots were sown this year was a clay loam and was summer-fallow the previous season. Of the 16 varieties that were tested, the table below gives the results this year with the most promising sorts.

Variety.	Days Maturing.	Yield.
Victory.....	89	Bus. Lbs. 106-28
Gold Rain.....	89	104-12
Banner.....	89	103-2

BARLEY.

Barley is sown in the spring when danger of severe frost is past. This season the variety plots were sown on May 11. The rate of seeding again depends on the vitality of the seed. When it tests up to standard a bushel and a half is sown per acre.

Before seeding the seed is treated with formaldehyde similarly to wheat. This year four hullless sorts failed to germinate. The only reason that can be assigned for