| Varieties. | Weight per Measured Bushel (pounds). | Yield per Acre. | |
|---|---|---|---|
| | | Straw (tons.). | Grain (bushels). |
| O. A. C. No. 61 | 54.0 | 2.2 | 30.1 |
| Saatroggen | 54.4 | 2.2 | 29.6 |
| Prolific | 54.2 | 2.0 | 26.6 |
| Common | 53.9 | 2.1 | 26.3 |

The O.A.C. No. 61 variety of spring rye was obtained through selection of individual plants from a variety of winter rye obtained from Germany.

A co-operative experiment with two varieties of spring rye was conducted over Ontario in each of the past seven years. The following gives the average yields per acre in each of the years and for the whole period:

| Varieties. | Average Yield of Grain per Acre (bushels). | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | 1911. | 1912. | 1913. | 1914. | 1915. | 1916. | 1917. | Average 7 years. |
| O. A. C. No. 61 | 17.9 | 26.8 | 20.0 | 25.4 | 18.2 | 42.1 | 22.5 | 24.7 |
| Common | 16.3 | 24.5 | 15.9 | 25.0 | 12.5 | 36.4 | 20.4 | 21.6 |

In the average of these co-operative tests conducted on thirty farms throughout Ontario, it will be seen that the O.A.C. No. 61 surpassed the Common variety of rye in each of the seven years. The average yield for the whole period was 3.1 bushels per acre per annum in favor of the former.

## Seed Selection of Spring Rye.

In each of the six years, from 1912 to 1917 inclusive, different selections of seed of spring rye have been tested at the College under similar conditions. Careful selections were made from a bulk lot of rye each spring and a uniform number of seeds were used for each plot. The following table gives the average of six years' results of the different selections:

| Selections. | Weight per Measured Bushel (pounds). | Yield per Acre. | |
|---|---|---|---|
| | | Straw (tons). | Grain (bus.). |
| Large seed | 53.3 | 2.0 | 26.0 |
| Medium seed | 53.3 | 2.0 | 24.4 |
| Small seed | 53.5 | 1.9 | 22.3 |
| Broken seed | 52.8 | 1.6 | 16.9 |