Table 2 contains information of great value, as the results for 1898 are given and also the average results of each variety for a period of five years. Although Table 3 gives results for only one year, the contents are both interesting and valuable as presenting the records of so many new varieties. Some of these have been grown for two, three, and even four years, but for the sake of a proper comparison of the whole number upon a uniform basis, the results for only one year are here presented.

One of the principal advantages of giving the results of so many varieties as are given in Tables 1 and 2, is to enable any farmer to compare the varieties which are new to him with those he has been familiar with for several years. It also enables him to select varieties that will likely be adapted to the conditions of his own particular soil. For heavy rich soils which usually produce a large growth of crop which is apt to lodge badly, those varieties possessing short stiff straw should be selected; while for light weak soils, those varieties with long heavy straw would likely give the best satisfaction. Generally speaking, the white wheats possess stiffer straw and yield more grain per acre than the red wheats, but the latter produce grain which weighs about one pound per measured bushel more than that produced by the white varieties. The hard, flinty, red wheats produce a strong flour which is comparatively dark in color, while the white wheats produce a beautiful white flour which is sometimes lacking in strength. Millers frequently mix the red wheat of Manitoba with the white wheat of Ontario in order to get a flour having a proper combination of both color and strength. The very hard wheats, such as are principally grown in the Canadian North-west and in the North-western States of the American Union, are nearly all red in color, while the softer wheats are represented by varieties of both the red and the white classes.

About twenty five acres of winter wheat are grown annually in the Farm Department of the Ontario Agricultural College. During the past three years the Dawson's Golden Chaff and the Early Genesee Giant varieties have been used for this purpose. The average yield produced from these two varieties when grown in the large fields for three years in succession has been about thirty-six bushels per acre.

Selection of Seed.

From a test made in our experimental grounds with two varieties of winter wheat in 1897 and again in 1898, we found that large plump seed produced a yield of 6 3-5 bushels per acre more than that produced from small plump seed, and 8¼ bushels per acre more than that produced from shrunken seed; and also that seed grain which had been broken by the threshing machine gave a yield of only 1-5 as much as that grown from the large plump seed. In this experiment, the yield of straw and the weight per measured bushel of the grain produced was also greatly influenced by the different selections of seed which were sown.

Different Dates of Seeding.

For six years in succession winter wheat has been sown on three or more different dates. This experiment has been conducted in duplicate each year and