

sorts by the tooth-like form of the kernels ; 2nd, flint corn, in which the upper end of the kernel is rounded and smooth ; 3rd, sweet corn, which may be known when ripe by the wrinkled surface of the grain ; and 4th, pop corn, the ears of which are small, the kernels small, hard and closely set on the ears and more or less pointed in form.

ESTIMATES OF YIELD, CHARACTER OF SOIL.

All the varieties enumerated in the following lists were sown in rows 3 feet wide with the kernels from 3 to 6 inches apart in the rows, and the calculations of the weight per acre are based in most instances on the yield of two rows of 100 feet each. Estimates based on the yield of small plots usually give larger results than can be obtained where the varieties are grown by the acre. They are, however, sufficiently accurate for the purpose of comparing the relative yield of different sorts. Much also depends on the condition of the land as to fertility. The experimental corn plots in 1889 were on a sandy loam, most of it rather light, which sown with roots in 1887 and received a coating of stable manure about 20 tons to the acre in the spring of 1888. This was followed by a crop of spring wheat. The land was ploughed in the fall and harrowed in the spring of 1889, first with a disc harrow and after that with the common iron harrow, and a dressing of about 200 lbs. per acre of a special corn fertilizer was used on the rows immediately after planting.

The land chosen for the corn plots in 1890 was a light sandy loam which was in pasture for several years before the farm was purchased. It was ploughed in the fall of 1887, a crop of oats was grown on it in 1888, a second crop of oats in 1889, and corn plots in 1890. This land has had no manure whatever nor any other fertilizer applied to it for many years, how many I am not able to say. The poverty of this soil, as compared with that selected for the corn plots last year, and the fact that no fertilizers were applied will probably account for the larger yield obtained in most instances in 1889. This poor piece of unmanured land was selected for the purpose of showing what crops of corn could be raised in the Ottawa district under unfavourable conditions, and at the same time gaining information as to the growth and yield of the different varieties under such circumstances.