

## 1980 MASSACHUSETTS HYBRID CORN EVALUATION

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Corn hybrids in 1980 were tested by the Department of Plant & Soil Sciences and Regional Cooperative Extension Services. Hybrids were evaluated for yield of silage and earcorn, percentage ears, standability, and moisture content. All hybrids submitted by contributing companies were tested in the Connecticut River Valley at Sunderland, Massachusetts. These results are presented and have been incorporated into the long term results of the testing program in this environment. The North Brookfield test included a smaller selection of these hybrids in this Worcester County hill environment. Results of these trials are made available to farmers, extension agents, seed distributors, seed salesmen and others upon request. Tables should not be reproduced if any portion is omitted or if order of data is changed.

Weather conditions during the 1980 growing season are summarized for the Sunderland trials under the hybrid yield data. Rainfall except for June was below normal and came as scattered thunder showers. June was somewhat cooler than normal but above average heat units were available in other months.

The Sunderland yield trial was planted May 16, 1980, using a cone type distributor mounted on a double disc opening corn planter in a conventionally prepared seed bed. Each plot was planted at the rate of 27,000 seeds per acre in 36 inch rows. Plots were three rows wide and 25 feet long. Each hybrid was replicated four times. Soil tests were used as a guide to fertilization. Plow down fertilizer was 170 lb N, 90 lb P<sub>2</sub>O<sub>5</sub> and 140 lb K<sub>2</sub>O per acre. Weeds were controlled with a pre-emergence application of 1.25 lb atrazine and 2 lb alachlor (Lasso) per acre. Weed growth was insignificant in all plots.

In the North Brookfield yield trial cultural practices were similar to those above and were the same as those used by the farmer Gerry Smith in the remaining portion of the field.

Corn silage plots were harvested when most entries were at the full dent stage. Ten feet of the row from the center of each plot was taken for yield estimation. Silage yields were adjusted to 70% moisture and earcorn yields to 25% moisture. An estimate of yield of grain in bushels per acre at 15.5% moisture can be made by multiplying earcorn yield by 25.4. Moisture content is reported as a percentage for corn harvested as silage. The number of standing and lodged plants were counted. Any plant broken below the ear or leaning across the neighboring row was considered lodged.

In addition to the corn hybrids tested, one forage sorghum "Red Top Kandy" was evaluated. This, sown two weeks after the corn, had a silage yield (70% moisture) of 30 tons per acre with a harvested moisture content on September 19 of 76%.



