

On-farm Evaluation of Corn Silage Yields

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In fall of 2001 corn silage yields were measured on a total of 12 fields on 6 farms across the state. This activity was possible through funding from USDA-NRCS and Massachusetts Dept. of Environmental Protection. Selection of the farms was primarily based on soil type and geography. In each location, three rows (30" apart), in each field, were selected and tagged. The selected area then divided into three 50' sections, each represented one replication. When the corn plants were 12" high, nitrogen in the form of ammonium nitrate was applied to all three rows by hand. Final harvest was taken at silage maturity stage (black layer) using 10' of middle rows. After harvesting, corn silage yield was adjusted on 70 percent moisture (Table 1).

On-farm yields varied from 20 t/ac to more than 30 t/ac showing a similar variation to that seen in the UMass corn testing program. Some of the variation was due to field productivity with location and some would have been due to hybrid effect. The fact that this breadth of variation was also seen on one farm suggests farmers should monitor yields to ensure appropriate yield goals and optimal crop nutrition.

Table 1. Mean corn silage yields for each field at each farm location.

Farm	Field #	Silage Yield Equivalent (ton/acre)
1	1	26.2
	2	25.6
	3	25.9
2	1	20.7
	2	31.7
	3	24.7
3	1	20.7
	2	28.3
4	1	23.5
	2	26.1
5	1	20.9
6	1	27.2