

## Evaluation of 1995 Corn Hybrids in Massachusetts

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Corn hybrids submitted by contributing companies in 1995 were tested by the Department of Plant & Soil Sciences, University of Massachusetts. Hybrids were evaluated for yield of silage and earcorn, percentage ears, and moisture content. The trials were planted in the Connecticut River Valley at the Massachusetts Agricultural Experiment Station Farm in South Deerfield, Massachusetts. The results are presented and have been incorporated into the long term results (3 or more years including one of the previous 3 years) of the testing program. 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.

The trials were planted May 2, 1995. A cone type distributor mounted on a double disc opening corn planter was used in a conventionally prepared seedbed at each site. Each plot was planted at the rate of 31,360 seeds per acre in 30 inch rows. Plots were 25 feet long and 3 rows wide. Each hybrid was replicated four times. Weeds were controlled with a pre-emergence application of 1 quart atrazine (AAtrax 4L) plus 1 quart metolachlor (Dual 8E) per acre. Preplant fertilization was at the rate of 600 lbs 15-8-12 per acre. In addition, the corn was side-dressed on June 19 with 250 lbs per acre of ammonium nitrate.

The 1995 growing season was warmer than normal for the months of May through Sept. The precipitation we received in May and June was substantially less than the norm for those months. However, July rainfall was approximately one-half inch more than the norm. August was very dry with an overall precipitation deficit of 2.3 inches under the norm for that month. September rainfall was slightly below the norm.

Corn plots were harvested when most entries had reached the full dent stage. Harvested dates are shown on each table of results. Ten feet of row from each plot was taken for yield estimation. Silage yields were adjusted to 70% moisture and earcorn yields to 25% moisture. Moisture content is reported as a percentage of corn harvested as silage.

### Climate Data for 1995 in South Deerfield, MA

	<u>Growing Degree Days</u>		<u>Rainfall (inches)</u>	
	<u>1995</u>	<u>Norm</u>	<u>1995</u>	<u>Norm</u>
May	298	268	2.22	3.87
June	562	527	2.92	3.62
July	761	701	4.28	3.80
Aug.	660	636	1.83	4.17
Sept.	379*	369	3.32	3.57
<b>Totals</b>	2660*	2501	14.57	19.03

\* To harvest date for medium-late maturity hybrids.

AVERAGE CORN YIELD FROM  
UNIVERSITY of MASSACHUSETTS SOUTH DEERFIELD TRIALS

<u>Brand</u>	<u>Hybrid</u>	<u>No. of Years</u>	<u>Silage<sup>1</sup> T/ac</u>	<u>Earcorn<sup>2</sup> T/ac</u>
<u>AGWAY</u>	AG295	3	25.4	6.0
	AG310	8	26.9	6.3
	AG427	5	28.5	6.5
	AG578	3	28.8	6.8
	AG626	3	32.3	7.5
	AG658	5	29.5	6.9
	AG797	5	30.0	6.1
	AG824	3	28.4	6.0
<u>CARGILL</u>	4327	5	27.9	6.2
	7877	5	31.2	7.0
	7897	3	30.5	6.2
<u>DEKALB</u>	646	3	33.4	7.4
<u>EASTLAND/TODD</u>	E340	4	27.1	6.1
	E495	4	31.7	6.9
	E599	4	29.1	6.4
<u>FUNK</u>	G4106	8	27.0	6.2
	G4260	3	26.6	5.9
	G4394	3	30.9	7.5
	G4446A	8	28.2	6.4
<u>HALSEY</u>	H1105A	5	27.3	6.6
	H1115A	4	29.3	6.9
<u>MUNCY CHIEF</u>	XA560	6	26.3	5.8
	XA777	5	29.1	6.5
	XA7790	3	26.6	5.4
<u>NORTHRUP KING</u>	N3624	8	28.7	6.7
	N4242	3	25.1	6.3
	N5220	3	27.8	6.5

<sup>1</sup>Silage @ 70% moisture      <sup>2</sup>Earcorn @ 25% moisture  
\*Averages based on the last ten years

EARLY HYBRIDS - HARVESTED SEPT. 20, 1995

BRAND	HYBRID	SILAGE <sup>1</sup> T/A	SILAGE % MOISTURE	EARCORN <sup>2</sup> T/A	EARCORN % MOISTURE	PERCENT EARS
FUNK	4214	32.5	59	7.6	41	59
NORTH-KING	N3624	30.6	61	7.3	40	60
DEKALB	DK446	30.4	59	6.7	37	55
CARGILL	3777	29.9	61	6.3	38	52
AGWAY	AG266	29.5	60	6.9	38	58
CARGILL	4127	29.3	62	7.0	42	60
EASTLAND	E334	28.6	58	6.8	38	59
AGWAY	AG366	28.1	59	6.7	40	60
DEKALB	DK412	27.7	57	6.3	37	57
AGWAY	AG262	27.6	60	6.4	40	58
AGWAY	AG295	27.5	57	6.6	39	60
FUNK	G4106	27.3	57	6.2	38	56
NORTH-KING	N2555	26.8	60	6.2	39	58
NORTH-KING	N3030	25.3	60	6.2	40	61
MEAN		28.7	59.2	6.6	39.0	58.1
LSD 5%		3.2	2.2	0.8	1.5	4.2

<sup>1</sup> Silage @ 70% moisture

<sup>2</sup> Earcorn @ 25% moisture

EARLY-MEDIUM HYBRIDS - HARVESTED OCTOBER 2, 1995

BRAND	HYBRID	SILAGE <sup>1</sup> T/A	SILAGE % MOISTURE	EARCORN <sup>2</sup> T/A	EARCORN % MOISTURE	PERCENT EARS
AGWAY	AG626	39.5	62	9.1	41	58
AGWAY	AG657	39.2	62	8.8	41	56
CARGILL	6208FQ	36.1	65	8.0	41	56
DEKALB	DK546	36.1	65	8.4	43	58
AGWAY	AG566	35.9	62	8.0	41	55
CARGILL	5677	35.7	64	7.6	43	53
DEKALB	DK527	35.0	60	8.6	39	61
EASTLAND	E495	33.6	65	7.1	39	52
NORTH-KING	N4640	33.5	60	8.0	39	60
FUNK	G4273	33.0	61	8.0	38	60
AGWAY	AG578	31.3	62	7.3	39	58
AGWAY	AG427	30.4	59	6.7	38	55
HALSEY	H298	28.8	60	6.4	39	55
NORTH-KING	N4242	26.9	60	6.3	37	58
MEAN		33.9	62.0	7.7	39.7	56.9
LSD 5%		3.3	1.9	0.8	1.4	2.8

<sup>1</sup> Silage @ 70% moisture

<sup>2</sup> Earcorn @ 25% moisture

MEDIUM-LATE HYBRIDS - HARVESTED OCTOBER 2, 1995

BRAND	HYBRID	SILAGE <sup>1</sup> T/A	SILAGE % MOISTURE	EARCORN <sup>2</sup> T/A	EARCORN % MOISTURE	PERCENT EARS
HALSEY	Ex95120	39.0	65	8.5	41	54
CARGILL	7897	37.8	63	7.5	39	49
AGWAY	792	37.1	66	8.1	40	55
AGWAY	797	37.0	65	7.6	39	52
DEKALB	DK646	36.7	55	8.2	35	56
FUNK	G4394	36.6	60	8.4	36	58
NORTH-KING	N6822	36.2	65	7.9	40	55
EASTLAND	E7800A	34.8	67	7.6	40	55
NORTH-KING	NK5220	34.5	51	7.9	35	57
CARGILL	7301FQ	34.4	67	7.1	42	52
AGWAY	AG767	34.1	64	7.2	41	52
EASTLAND	E590	33.2	61	7.4	38	56
DEKALB	DK580	32.8	56	8.4	34	64
HALSEY	H1115A	31.0	63	6.9	38	55
MEAN		35.4	62.0	7.8	38.5	55.0
LSD 5%		5.4	5.4	1.4	1.7	5.2

<sup>1</sup> Silage @ 70% moisture

<sup>2</sup> Earcorn @ 25% moisture