

## Farm and Weather Summary

Ken Pecinovsky, farm superintendent

### Farm Comments

Field Days and Tours: A total of 1,200 people attended 30 events at the farm in 2002. These events included field days, tours, meetings, the annual association meeting, evening classes, and a seed company training field day. Evening classes included subjects on farm record keeping, manure management, the new farm bill, agronomic research results, dried flower arranging, and master gardener training.

New Projects: Triticale variety/planting study, L. Gibson; Tillage/nutrient source study, M. Al-Kaisi; Soybean seed treatment bean leaf beetle study, M. Rice; Strawberry trial, P. O'Malley; Corn planting depth, speed, and population; soil compaction; herbicide crop injury; and various bean leaf beetle insecticide interaction studies by the Northeast Farm staff.

### Crop Season Comments

Oat/legume seeding and spring manure injection applications occurred March 28–29. Anhydrous ammonia applications occurred April 6–16.

Corn planting began April 17 and was completed May 14. Harvest began September 27 and was completed October 27 with average yields of 200 bushels/acre for most rotated acres and 190 bushels/acre for continuous corn. These were the highest corn yields in the 27 years of the farm's history.

Soybean planting started May 14 and was completed May 19. Harvest began October 10 and was completed October 19 with average yields of 55 bushels/acre.

### Weather Comments

Winter 2001-2002: The first snowfall was December 23, and the last was April 2, with a

total of 17 inches recorded (almost 28 inches less than the previous winter). The 4-inch soil temperature remained below 50°F after November 18, 2001.

Spring 2002: The frost was out of the top 2 ft of soil after March 16. Soil temperatures averaged about 50°F after May 2. Planting was ahead of schedule because of 24 days in May when fieldwork was possible. Rainfall was timely and caused no erosion during the entire growing season.

Summer 2002: Minimal crop stress was noted in early July after a 14-day period with no rainfall, but 7.04 inches fell the last 2 weeks of July.

August rain totaled 6.12 inches, which was ideal for the corn fill period, but soybean yields could have improved with more rain in September.

Bean leaf beetles were again a concern in 2002, but sweep count numbers decreased after August 6. Bean leaf beetle insecticide treatments only provided a 2–3 bushel yield increase compared with a 5–8 bushel yield increase in 2001. Soybean aphids were expected to be a concern, but the 2002 populations never reached economic thresholds. Western bean cutworms were noted in a portion of the corn; black cutworms were not present.

Fall 2002: Snow and rain occurred on 20 days during the harvest season, causing harvest delays. Corn was harvested in the 17–25% moisture range. Corn harvest was difficult due to lodged corn caused by wind storms in July and August.

### Acknowledgments

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**Table 1. Northeast Research and Demonstration Farm, Nashua, monthly rainfall and average temperatures for 2002.**

Month	Rainfall (inches)		Days with rain	Temperature (°F)*		GDD**	Days 90° or above
	2002	Deviation from normal		2002	Deviation from normal		
April	4.31	0.96	10	47.70	0.75	173	0
May	2.97	-1.38	9	57.10	-2.23	330	0
June	2.97	-1.94	9	71.48	3.14	624	7
July	7.04	2.40	9	75.05	2.89	741	10
August	6.12	1.35	11	69.55	-0.32	609	0
September	1.99	-1.51	11	65.39	3.91	507	3
October	2.12	-0.54	17	45.48	-3.92	112	0
November	<u>0.29</u>	<u>-1.66</u>	<u>3</u>	33.62	-0.37		0
Totals	27.81	-2.32	79		1 <sup>st</sup> /2 <sup>nd</sup> Freeze – Sept 24/Oct 7, 2002		

\*150 frost-free days

\*\*GDD = Growing degree days