

Growth Technology

NITROZYME TEST RESULTS

A brief summary.....

Ottawa Research Station of Agriculture , Canada (J.A. Simmonds & M. Beauchamp)

1. Nitrozyme increases the rate of germination, growth, and flowering of *Impatiens*
2. Nitrozyme can shorten by four days the time required to grow *impatiens* seedlings for bedding plants.
3. Nitrozyme treated plants had 50% more leaves than their untreated counterparts, and these leaves were one-third larger on the plants receiving Nitrozyme.

Their conclusions:

- 44% improvement in germination rate
- 57% more leaves
- 34% larger leaves
- 5 days earlier flowering
- 6% reduction in operation time

University of Alberta, Edmonton - Department of Genetics (Dr January Weijer)

1. Wheat - Different wheat varieties were selected and the average yield increase was 15.6% in 1985 and 18.7% in 1986.
2. Barley - Trials with different barley varieties gave an average yield increase of 14% in 1985 and 19.3% in 1986.
3. Oats - Field trials with Nitrozyme gave an increase of 15.2% in 1985 and 25.2% in 1986.
4. Canola - Average yield increases of 17.1% in 1985 and 32.4% in 1986 were recorded with the Tobin and Westar varieties.
5. Alfalfa - Yield increases of 9.5% in 1985 and 26% in 1986 were recorded. The use of Nitrozyme on alfalfa crops indicates a significant feed quality improvement.
6. Corn - Nitrozyme treated corn plots yielded 24.4% more than the controls, while Nitrozyme, when combined with fertiliser, increased yields 30.2%.

Extensive Canadian Field Trials 1985 - 1990

1. Wheat - Different varieties of wheat were selected and the increase of plot and field trials were 4% and 24% over the control.
2. Barley - Plot and field trials with different barley varieties gave an increase of 8% to 24% over the control.
3. Canola - Yield increases of 30.8% to 32.3% were recorded.
4. Corn - Treated plots increased yields by 3.3% to 39.2% over the control.
5. Potatoes - Yield increase of 123% to 24% were recorded with a variety of potatoes.

Cucumber Seed Germination Test

Root Length after 6 days

- Treated Show:
- 37% more root length
 - 50% more feeder roots
 - 67% more stem length

- Note:
- Treated stems were noticeably thicker
 - Treated showed almost no fungus - untreated showed fungus
 - Treated plants took much longer to dry up after removed from moisture

Test Results - Percentage of increase from research data

Cultivar

1. Bartlett Pears

Increase over Control

Weight 35%, Diam. 17%

Pressure Test 15%

2. Corell Peaches

Wt. 14%, Diam 12%

Pressure Test 63%

3. Carrots

Wt. 68% Wdth 11%, Appear. 36%

Core 57%, 10%, Colour 8%, Uniformity 9%

4. Onions

Wt. 12%, Colour 46%, Firmness 18%, Diam 17%

Uniformity 11%

5. Cabbage

Wt 38%, Circumf. 25% Uniformity 6%

6. Celery (summer)
(fall)

Wt. 42%, Circumf. 9%, Length 6%

Wt. 37%, Circumf. 7%, Length 15%

7. Tomatoes

Wt. 110%, Diam. 35%

Flowering or Blossoms 177%

8. Red Beets

Wt. 43%, Diam. 44%, Leaf Length 17%

9. Lettuce

Wt. 44%, Circumf. 32%, Uniformity 17%

10. Corn

Wt. 27%

11. Potatoes

Wt. 17%

Alberta Agriculture Statistics - Average Yield per acre (Edmonton and area) 1988 Crop Year Average Yield and Returns

	Average Yield Bushels	Average Increase %	Average Increase Bushels	Price/ Bushel	Cost Per Acre	Return Per Acre
Wheat	44.5	18%	8.01	3.66	7.75	29.31
Barley	65.3	18%	11.75	2.33	7.75	27.37
Canola	25.9	25%	6.47	6.72	7.75	43.50

SOURCES - Research Conducted by Independent Researchers across Canada

Professor Dr. Ian MacQuarrie
University of Prince Edward Island

Professor Emeritus Dr January Weijer
University of Alberta

Ellen Laan - Ontario Researcher
Holland Marsh area and Muck Research Station area

Dept. Of Agriculture - West Prince Regional Service
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Integrated Crop Management Service
Research done in Alberta, Saskatchewan, Manitoba
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