

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
2. Corell Peaches
3. Carrots
4. Onions
5. Cabbage
6. Celery (summer)
(fall)
7. Tomatoes
8. Red Beets
9. Lettuce
10. Corn
11. Potatoes

Increase over Control

Weight 35%, Diam. 17%
 Pressure Test 15%
 Wt. 14%, Diam 12%
 Pressure Test 63%
 Wt. 68% Wdth 11%, Appear. 36%
 Core 57%, 10%, Colour 8%, Uniformity 9%
 Wt. 12%, Colour 46%, Firmness 18%, Diam 17%
 Uniformity 11%
 Wt. 38%, Circumf. 25% Uniformity 6%
 Wt. 42%, Circumf. 9%, Length 6%
 Wt. 37%, Circumf. 7%, Length 15%
 Wt. 110%, Diam. 35%
 Flowering or Blossoms 177%
 Wt. 43%, Diam. 44%, Leaf Length 17%
 Wt. 44%, Circumf. 32%, Uniformity 17%
 Wt. 27%
 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
Prince Edward Island

Integrated Crop Management Service
Research done in Alberta, Saskatchewan,
Manitoba
under direction of Robert Geier and Brent
Wright, Msc

Terra Consulting Inc.
Dale Doram P Ag Saskatoon, Saskatchewan