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2002 Crop Results

Vitazyme on Potatoes, for Seed

Researcher: C.K. Kim *Research organization*: Dae Yu Company, Ltd.
Location: Bongsung-Ri, Aeyoul-Eup, Jeju-City, Korea *Variety*: Daeji
Soil fertility: unknown *Soil type*: unknown
Planting date: Autumn of 1999, spring of 2001, fall of 2001
Experimental design: A field area of 100 m^2 (10 "are") was used for this study. Vitazyme and three other products were compared to a control treatment for all three plantings. The five treatments were randomized and replicated three times, with five plants for each plot.

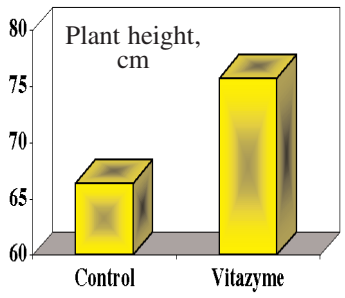
1. **Control**
2. **Vitazyme**
3. **Product A–1**
4. **Product A–2**
5. **Product B**

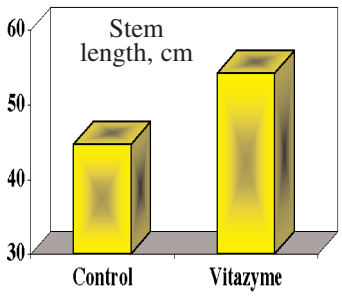
Fertilizer treatments: unknown
Vitazyme treatments : (1) 2 liters/hectare (26 oz/acre) as a 1:3,000 dilution, sprayed on the leaves and soil at 25 cm plant height; (2) the same application at early bloom
Other biostimulant treatments: The same applications as for Vitazyme, but for Product A-1 a 1:500 dilution was used; for Product A-2 a 1:1,000 dilution was used; for Product B a 1:1,000 dilution was used.
Results: No individual plot data could be obtained for this study, so only treatment means are shown.

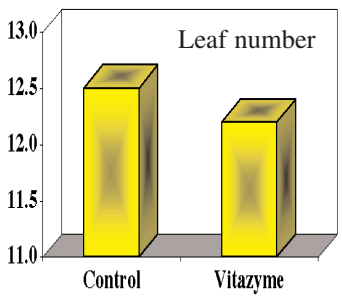
Fall Planting–Plant Response Study

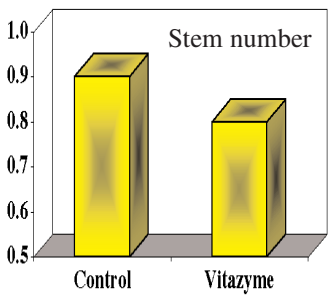
Measurements were made 45 days after planting.

Treatment	Plant height	Change	Stem length	Change	Leaf number	Change	Stem number	Change
	---------- cm ----------							
Control	66.4	——	44.7	——	12.5	——	0.9	——
Vitazyme	75.7	9.3 (+14%)	54.1	9.4 (+21%)	12.2	(–) 0.3 (–2%)	0.8	(–) 0.1 (–11%)
Product A-1	74.9	8.5 (+13%)	51.0	6.3 (+14%)	13.6	1.1 (+9%)	0.5	(–) 0.4 (–44%)
Product A-2	71.9	5.5 (+8%)	48.5	3.8 (+9%)	11.6	(–) 0.9 (–7%)	0.9	0 0
Product B	80.6	14.2 +21%)	56.3	11.6 (+26%)	13.2	0.7 (6%)	0.7	(–) 0.2 (–22%)





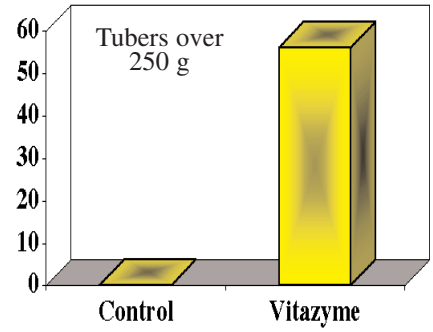


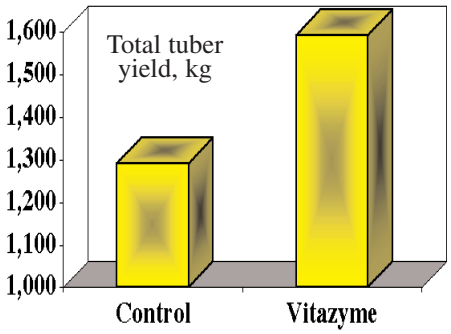


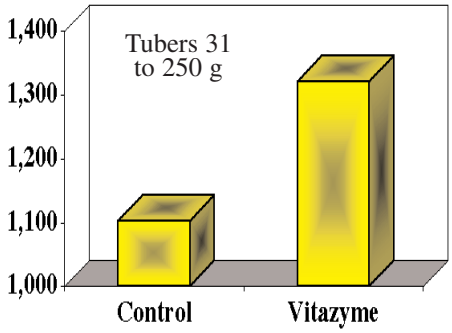
Spring Planting

Measurements were made 90 days after planting

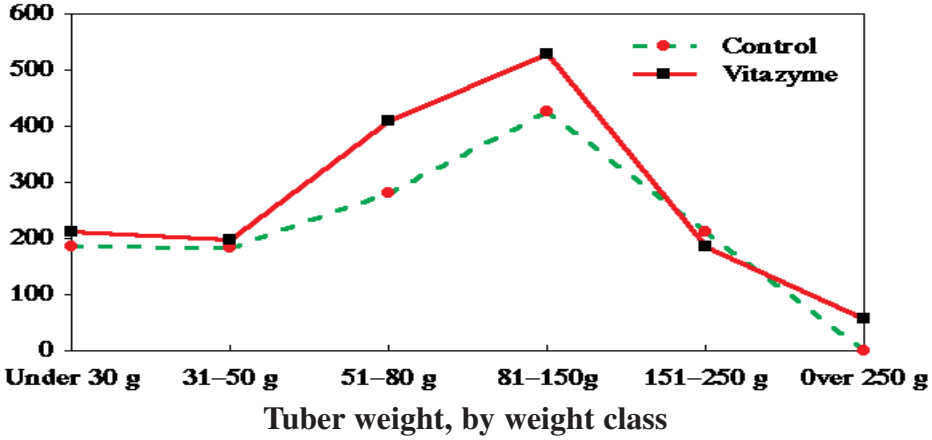
Treatment	Under 30g	31to 50 g	51to 80 g	81 to 150 g	151 to 250 g	Over 250g	Total	Change	31 to 250 g
	kg of tubers/100 square meters								
Control	185	183	282	426	213	0	1,290	——	1,103
Vitazyme	213	197	410	528	186	56	1,590	300(+23%)	1,321 (+20%)
Product A-1	156	145	296	408	283	0	1,288	-2 (0%)	1,132 (+2%)
Product A-2	172	170	293	529	186	31	1,380	90 (+7%)	1,177 (+7%)
Product B	183	207	308	369	203	0	1,270	(–)20 (-2%)	1,087 (-2%)







Increase in tuber yield: 23%

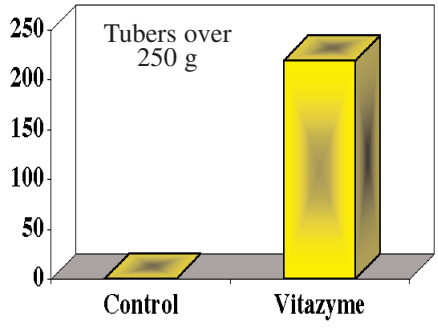


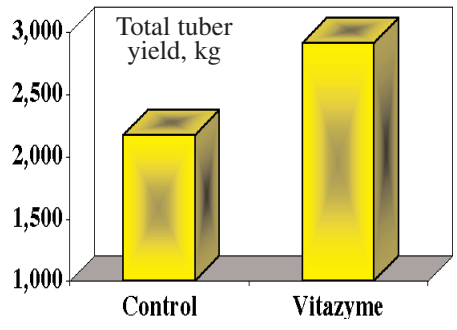
Tuber weight, by weight class

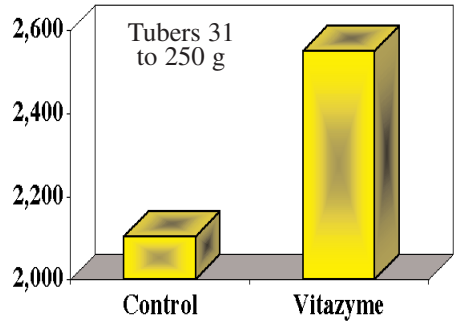
Fall Planting

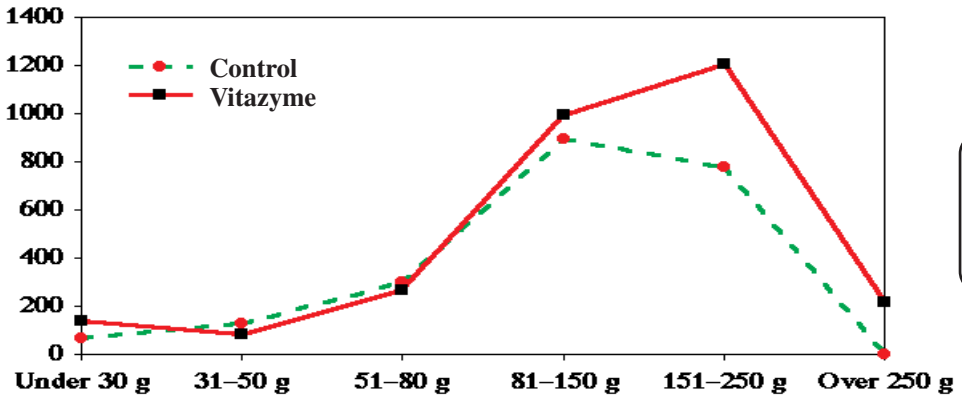
Measurements were made 90 days after planting.

Treatment	Under 30g	31to 50 g	51to 80 g	81 to 150 g	151 to 250 g	Over 250g	Total	Change	31 to 250 g
	kg of tubers/100 square meters								
Control	69	130	299	897	778	0	2,172	——	2,103
Vitazyme	141	83	265	995	1,205	219	2,908	736 (+34%)	2,548 (+21%)
Product A-1	99	24	379	935	687	337	2,461	289 (+13%)	2,025 (–4%)
Product A-2	87	125	333	693	1,437	0	2,675	503 (+23%)	2,588 (+23%)
Product B	118	86	160	1,296	1,111	148	2,920	748 (+34%)	2,654 (+26%)









Tuber weight, by weight class

Increase in tuber yield: 34%

Conclusions: Vitazyme enhanced early potato growth in this Korean study by 14% in plant height and 21% in stem length. Yields of potatoes were increased by 23 to 34% above the controls, and tuber weight was increased by Vitazyme toward the larger sizes.