



Huma Gro® Stories From the Field—SE United States No. 1

Florida: Begonia, Caladium, Celery, Coreopsis, Lychees, Nematodes, Oranges, Peppers, Strawberries
 Georgia: Blueberries, Cotton, Cucumbers, Peanuts, Squash, Watermelon

Zap® and Breakout® on Cotton in Georgia



Zap® was applied in-furrow at 0.5 gal/ac and, at first pinhead square, 1 foliar application was made of Breakout® at 1 qt/ac. In each photo, the plant on the **right** was treated with these Huma Gro® products. Root mass, plant height, and plant vigor were all improved.

Breakout® on Cotton in Georgia

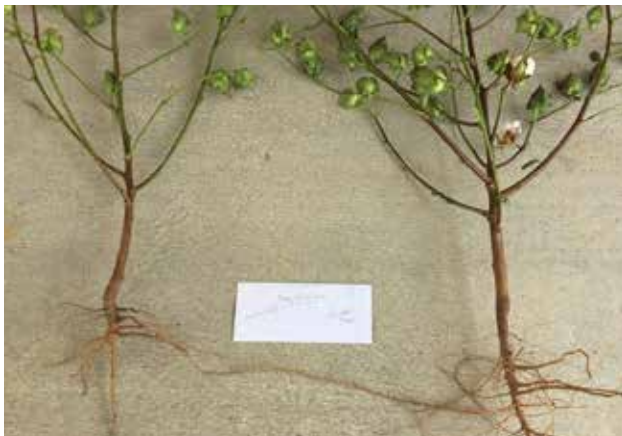


(Left) Breakout® was foliarly applied twice at 1 qt/ac vs. Control of no Breakout®. Boll counts at this time were 44 (untreated) vs 65 bolls (treated).

(Below) Breakout® was foliarly applied twice at 1 qt/ac vs. Control of no Breakout®. Boll counts at this time were 26 (untreated) vs. 50 bolls (treated).



(Left) Breakout® was foliarly applied 3 times at 1 qt/ac vs. Control of no Breakout®. Boll counts at this time were 17 (untreated) vs. 53 (treated).



Vitol®, Breakout®, Calcium, Max Pak®, Promax® for Superior Florida Strawberry Transplant Sets



A Florida strawberry grower set aside a 30-acre block out of 88 acres to try a Huma Gro® program (including fumigation replacement) on transplants. He foliarly applied Vitol®, Breakout®, and Calcium at a rate of 1 pt/ac each every 7–10 days, with a 1/2 gal/ac of Zap® and 1/2 gal/ac of Promax® applied monthly to the soil through irrigation. In addition, 1 pint /ac of Max Pak® was foliarly applied every 14 days or as needed. While the grower was experiencing transplant mortality across his fields after fumigation, this 30-acre plot *experienced zero transplant mortality (no plants had to be reset)*. The grower now applies at least Max Pak® to 100% of his acres.

Promax® and Zap® Reduce Root Knot (RK) Nematodes at Disney World Epcot Center

Fields Sampled	5/25 RK Nematodes	6/01 Soil Injection	6/14 Soil Injection	6/30 RK Nematodes	7/24 Fertigation	7/31 Fertigation	8/14 RK Nematodes	8/20 Soil Injection	10/09 RK Nematodes	12/01 Broad-cast	12/09 RK Nematodes
Cassa-banana	26	Zap® (1 gal/ac)	Zap® (1 gal/ac)	10	Promax® (1 gal/ac)	Zap® (1 gal/ac)	4	Promax® (1 gal/ac)	3	Promax® (1 gal/ac)	0
Cassa-banana 2	12	Zap® (1 gal/ac)	Zap® (1 gal/ac)	3	Promax® (1 gal/ac)	Zap® (1 gal/ac)	2	Promax® (1 gal/ac)	6	Promax® (1 gal/ac)	4
Sun-flower				688						Promax® (1 gal/ac)	0
African Blue Basil				25						Promax® (1 gal/ac)	0
Corn				800						Promax® (1 gal/ac)	0



Coffee Trees with Nematodes: The first thing the Epcot Center greenhouse manager said after using ZAP® (1 gal/ acre in methods and times listed in table above) was that his coffee trees looked a ton better. Struggling yellow leaves on the **Before** photos from nematode damage. Healthy, deep green on the **After** photos.





Huma Gro® Stories From the Field—SE United States

No. 1

Huma Gro® Full Program Boosts Yields Through Frost Damage to Georgia Blueberries



Frost destroyed the majority of the Georgia 2017 blueberry crop. One farm with overhead irrigation was in its first year of switching to a Huma Gro® full program. The program included Super Nitro®, Super Phos®, Super Potassium®, Vitol®, Breakout®, Max Pak®, Calcium, and Jackpot®. Similar varieties and age of plants that also had frost protection yielded around 8,000 lb/acre, but this farmer did over 10,400 lb/acre.

Promax® and Zap® Decrease Nematodes on Cucumbers in Georgia



The farmer saw nematode damage on cucumbers and asked for help after planting (Photo 1). Drip applications were made of 1 gal/ac Promax® mid-season and then 1 gal/ac of ZAP® 2 weeks later (Photo 2). The grower's standard yielded 12 bins/acre. The Huma Gro® treated field yielded 22 bins/acre. The fields are side by side.

Promax®, Vitol®, and Breakout® Increase Squash Yields in Georgia



Fumigation was replaced with 1 gal/ac Promax® preplant through drip, then another ½ gal/ac 14 days post-planting through drip. Vitol® was foliar-applied at 16 oz twice at 7 and 14 days post-planting. Breakout® was foliar-applied at 32 oz 21 days after planting. (Biologicals were also applied.) Unfortunately, a whitefly virus caused severe yield loss on all fields. The growers' standard yielded 1.5 bins/acre. Huma Gro® yielded 3.85 bins/acre. The fields are side by side. Photo 3 is Conventional; Photo 4 is Huma Gro®.

Vitol® and Breakout® on Coreopsis and Begonia in Florida



Vitol® and Breakout®, 1 foliar application each of 1 qt/ac.

Iro-Max® Improves Iron and Sulfur Levels in Florida Lichees

	N	P	K	Mg	Ca	S	B	Zn	Mn	Fe	Cu	Sample ID
8/31	2.1	0.39	0.87	0.37	0.95	0.17	55.6	46.4	133	43	17.4	32
8/31	2.11	0.18	0.84	0.36	0.92	0.16	53.5	44.7	128	42	17.0	33
8/31	2.13	0.17	0.8	0.35	0.98	0.15	47.6	35.4	108	40	17.6	34
8/31	2.31	0.18	0.86	0.36	0.88	0.17	54.9	45.4	138	46	18.1	35
9/11	Hurricane Irma											
11/5	1 qt/ac Iro-Max® in drip											
11/20	2.03	0.25	1.00	0.42	1.44	0.23	39.2	67.4	132	64	14.1	32 & 33
11/20	2.07	0.24	0.82	0.6	1.92	0.26	47.2	84.6	213	50	17.2	34 & 35

High Sufficient Low Deficient

The lab recommendations were for 3 lb foliar S and 5–6 lb chelated Fe. The grower injected (not foliar) 0.11 lb S and 0.22 lb Fe using 1 qt/ac Iro-Max® (4% S, 8% Fe). Here's what the grower reported: "Good flushes, 6–18 inches. Leaves are very full, look more like banana leaves! Greened everything right up. Looks amazing! I've been trying for a full year to bring up my Iron and Sulfur levels without success. I'll be doing this dose again, as well as applying foliar Breakout®."



Huma Gro® Stories From the Field—SE United States

No. 1

Fertilgold® Ca Improves Calcium Levels on Florida Celery Hearts

			Heart Sample		Tissue Sample	
			Fertilgold® Ca	Control	Fertilgold® Ca	Control
1 day	1/26	Planting				
62 days	3/29	40 oz Ca/ac foliar				
67 days	4/03	40 oz Ca/ac foliar				
69 days	4/05	Lab Sample	X	X	5.09%	4.74%
74 days	4/10	40 oz Ca/ac foliar				
81 days	4/17	40 oz Ca/ac foliar				
84 days	4/20	Harvest Began				
89 days	4/25	Lab Sample	3.69%	0.88%	2.95%	4.19%
98 days	5/04	Lab Sample	3.54%	0.99%	6.16%	5.18%



Normally, the grower adds very high amounts of dry and liquid calcium to his celery crop with no response occurring in celery heart calcium levels. In this trial, the farmer was very impressed with how much Fertilgold® Ca was moving calcium to the celery heart, showing that Fertilgold® Ca (1) gets metabolized and (2) translocates to the celery heart.

Super Phos® Improves Phosphorus Levels in Florida Orange Trees

Date	P Value of Leaf Tissue Test by Sample #									Avg P
	1	2	3	4	5	6	7	8	9	
8/16/19	0.21	0.23	0.23	0.22	0.22	0.21	0.24	0.23	0.23	0.22
1/17/19	0.18	0.18	0.20	0.18	0.20	0.19	0.21	0.21	0.22	0.20
7/13/18	0.19	0.22	0.19	0.18	0.22	0.17	0.21	0.17	0.19	0.19
Begin Super Phos® Program of 3 applications of 2 qt/ac										
1/19/18	0.20	0.18	0.16	0.21	0.16	0.17	0.15	0.15	0.14	0.16
7/12/17	0.13	0.14	0.13	0.14	0.13	0.14	0.13	0.13	0.13	0.13
1/10/17	0.18	0.19	0.17	0.17	0.18	0.17	0.17	0.22	0.18	0.18
7/25/16	0.16	0.14	0.14	0.14	0.14	0.14	0.15	0.13	0.15	0.14
1/14/16	0.22	0.19	0.20	0.18	0.20	0.17	0.21	0.19	0.19	0.19
7/25/15	0.14	0.16	0.17	0.15	0.19	0.14	0.16	0.15	0.16	0.16
1/29/15	0.16	0.17	0.16	0.15	0.18	0.16	0.17	0.15	0.15	0.16
7/17/14	0.16	0.20	0.16	0.15	0.16	0.10	0.14	0.23	0.15	0.16
1/24/14	0.17	0.17	0.17	0.19	0.15	0.12	0.17	0.12	0.16	0.16
7/10/13	0.14	0.14	0.14	0.14	0.14	0.14	0.13	0.15	0.15	0.14

The farmer's focus was on increasing the phosphorus levels in his orange trees to reduce the effects of citrus greening and resultant fruit drop. He made 4 applications of Super Phos® at a rate of 2 qt/ac in a broadcast application with his herbicide sprays, plus a couple of stand-alone applications for a total of 3 gal/ac for the year. Average phosphorus levels increased from 0.16 to 0.22. The farmer said, "Using Super Phos® is a no-brainer: It pays for itself!"



Huma Gro® Ultra-Precision® Blend on Florida Strawberries

Ultra-Precision® is a custom blend of Huma Gro® products for a specific grower on a specific field for a specific crop. The Huma Gro® products blended for this particular grower and crop included Super Phos®, Super Potassium®, Sili-Max®, X-Tend®, Fertil Soil®, Calcium, Fertil Humus®, AN-Max™, Boro-Pro®, 44 Mag®, Manganese, Z-Max®, Iro-Max®, Vitol®, Activol®, Breakout®, Sulfur, Comol™, and Surf-Max®. Also, Promax® and Zap® were used to replace fumigation. The Ultra-Precision® Blend replaced 17 products that were the Grower's Standard, and the Blend was applied at a rate of 10 gal/ac/week, portioned out over the week with the irrigation cycles.



With this particular Ultra-Precision Blend for a strawberry grower in Central Florida, application increased yield by 16% over the grower's standard control.



Vitol® and Breakout® on Watermelon in Georgia



A Georgia grower foliarly applied Vitol®/Breakout® at 1 pt/ac/week each since transplant—for a total of 12 applications each either with fungicides or solo—resulting in an increase of over 20,000 lb/ac (33%) on average. The grower reported that uptake of other nutrients (such as calcium) has been better, shelf-life has increased, vines pick right up after harvesting, thickness of vines has increased, and color has improved.



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No. 1

Vitol®, Breakout®, Calcium, Super Phos® Save Jalapeño Peppers in Central Florida



Photo 5



Photo 6

These photos represent 34 acres of jalapeño peppers in Central Florida. **Photo 5** shows peppers 10–14 days after transplant. The grower was discouraged and thought about terminating the crop, convinced that it could not be saved due to use of 2-year plastic and planting back-to-back peppers. Huma Gro® Representative Jason Garcia suggested an alternative. **Photo 6** shows the same plants 14–21 days after initial application of Jason’s recommended Huma Gro® program. The initial program called for application of 2 qt/acre of Super Phos® and 1 qt/acre of Breakout® through the drip irrigation, with 2 qt/acre of Vitol® and 1 qt/acre of Breakout® foliar-applied. This was followed by 1 pt/ac each, every 7–10 days, of foliar-applied Vitol®, Breakout®, and Calcium. At the end of the season the grower had averaged over 1,800 boxes per acre (an 80% increase over prior years), and he said it was the best jalapeño crop he’d ever had.

Promax® Stops Nematodes in Florida Caladium



Photo 7



Photo 8

A Caladium grower in Florida was experiencing nematode hot spots in his rows, and he found it was not practical to inject other forms of nematicides mid-season. Instead, he applied 1 gal/ac of Promax® and followed up with a 2-qt/ac rate every 21 days for 4 cycles. The grower reported that Promax® stopped the nematodes in their tracks: in the past he would have probably lost the whole row, and he estimates that Promax® has helped him save several fields. Now he is using Promax® proactively, applying it mid-season behind fumigation when fumigation isn’t enough. In **Photo 8**, the red flag marks the spot where Promax® was injected (to the right) to save the crop. The photo is after defoliation for bulb harvest. The grower said, “All in all, I’m convinced that if I had not used Promax® I would have lost a lot more of a block. It seems to have stopped the nematodes from spreading.”

Vitol® and Breakout® on Peanuts in Georgia



The grower found that on Aug. 5 this peanut field was really behind in growth compared with his other fields. To give the field a boost, the grower foliarly applied 1 qt/ac of Vitol® that day, and he foliarly applied 1 qt/ac Breakout® at the end of August. The grower was very pleased with the growth that occurred in the field immediately after the applications.