

CHEMICAL 50
DYNAMICS YEARS

soar



2023 Soar Bloom Research Results



CD

www.chemicaldynamics.com

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Research Overview

SOAR Bloom Spray contains a balanced combination of chelated micronutrients, *Ascophyllum nodosum* (seaweed), and humic and fulvic acids that activate the production of beneficial enzymes and catalysts within the plant.

These biologically active seaweed-based compounds aid in breaking down complex starch molecules (oligosaccharins) providing more available energy to be used in active transport and absorption of minerals.

High quality humic and fulvic acids have also been added to the blend to optimize the assimilation and translocation of nutrients. This synergistic mix has been specially formulated to correct and prevent mineral deficiencies and stimulate plant growth, especially during periods of environmental stress.

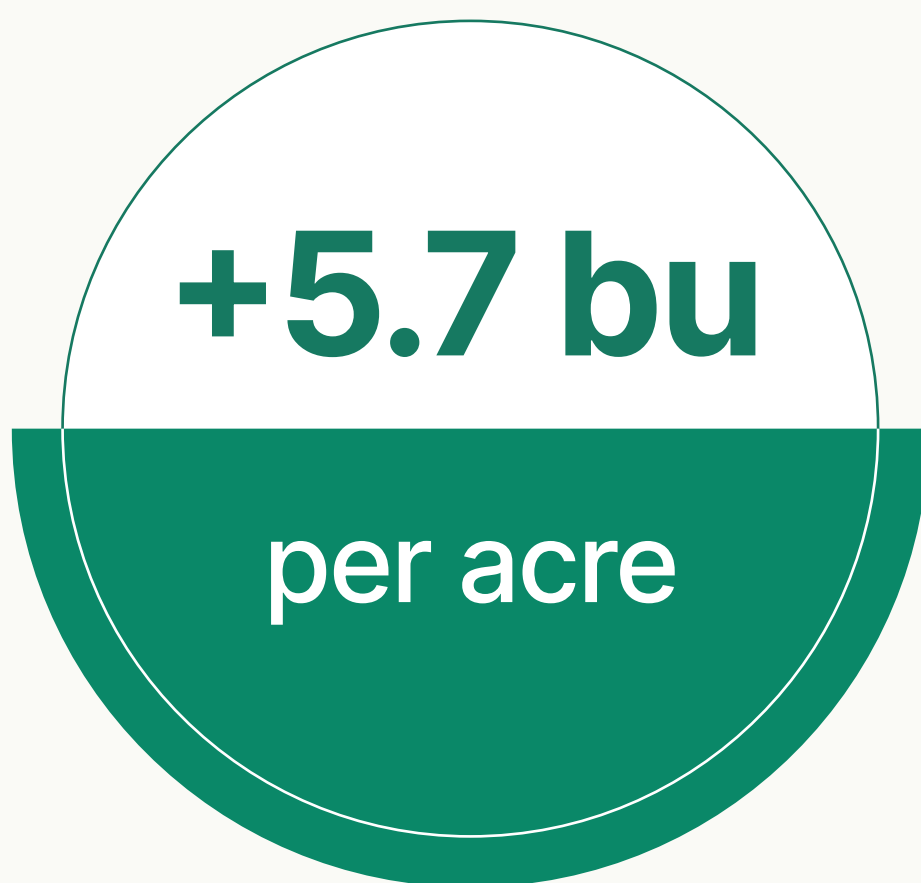
Since 2018, Chemical Dynamics has been testing our SOAR Bloom Spray and its proprietary makeup on cotton and soybean farms, working in collaboration with Southern Ag Services and Agricenter International. We're thrilled to see continually growth year after year and are excited to share our results with you.

Soybean Trial Results

soar Bloom Spray

2 quarts/Acre Applied at R3
\$12/Acre Estimated Grower Cost

IRRIGATED TRIALS



DRYLAND TRIALS



Yield Increase

+\$68/Acre
Revenue Increase

5.7X
Cash Returns

Assumes soybean prices of \$12/bushel

+\$18/Acre
Revenue Increase

1.5X
Cash Returns

Assumes soybean prices of \$12/bushel

Soybean Trial Results

Bloom Spray

2021-23 Irrigated Research Trials Details

- ✓ Research results of Soar Bloom Spray on soybeans
- ✓ 37 irrigated farm plots used from 2021-2023
- ✓ 29 dryland farm plots used from 2021-2023
- ✓ Research conducted by Southern Ag Services and Agricenter International



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Bloom Spray

Guaranteed Analysis:

Calcium (Ca).....	4.00%
4.00% Chelated Calcium (Ca)	
Magnesium (Mg).....	1.00%
1.00% Chelated Magnesium (Mg)	
Boron (B).....	1.00%
Molybdenum (Mo).....	0.02%
<i>Derived from: Calcium glucoheptonate, Magnesium glucoheptonate, sodium molybdate and ascophylum nodosum</i>	

Non-Plant Food Ingredients:

Humic Acid.....	0.50%
Fulvic Acid.....	0.20%
<i>Derived from: processed Leonardite shale</i>	

Cotton Trial Results

soar Bloom Spray

2 quarts/Acre x2 Applied at Pinhead Square and Mid-Full Bloom
\$24/Acre Estimated Grower Cost

IRRIGATED TRIALS



DRYLAND TRIALS



Yield Increase

+\$77/Acre
Revenue Increase

3.2X
Cash Returns

Assumes cotton prices of \$0.80/pound

+\$33/Acre
Revenue Increase

1.6X
Cash Returns

Assumes cotton prices of \$0.80/pound

Cotton Trial Results

soar Bloom Spray

2019-23 Irrigated Research Trials Details

- ✓ Research results of Soar Bloom Spray on cotton
- ✓ 42 irrigated farm plots used from 2019-2023
- ✓ 49 dryland farm plots used from 2018-2023
- ✓ Research conducted by Southern Ag Services and Agricenter International



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Bloom Spray

Guaranteed Analysis:

Calcium (Ca).....	4.00%
4.00% Chelated Calcium (Ca)	
Magnesium (Mg).....	1.00%
1.00% Chelated Magnesium (Mg)	
Boron (B).....	1.00%
Molybdenum (Mo).....	0.02%
<i>Derived from: Calcium glucoheptonate, Magnesium glucoheptonate, sodium molybdate and ascophylum nodosum</i>	

Non-Plant Food Ingredients:

Humic Acid.....	0.50%
Fulvic Acid.....	0.20%
<i>Derived from: processed Leonardite shale</i>	

Corn Trial Results

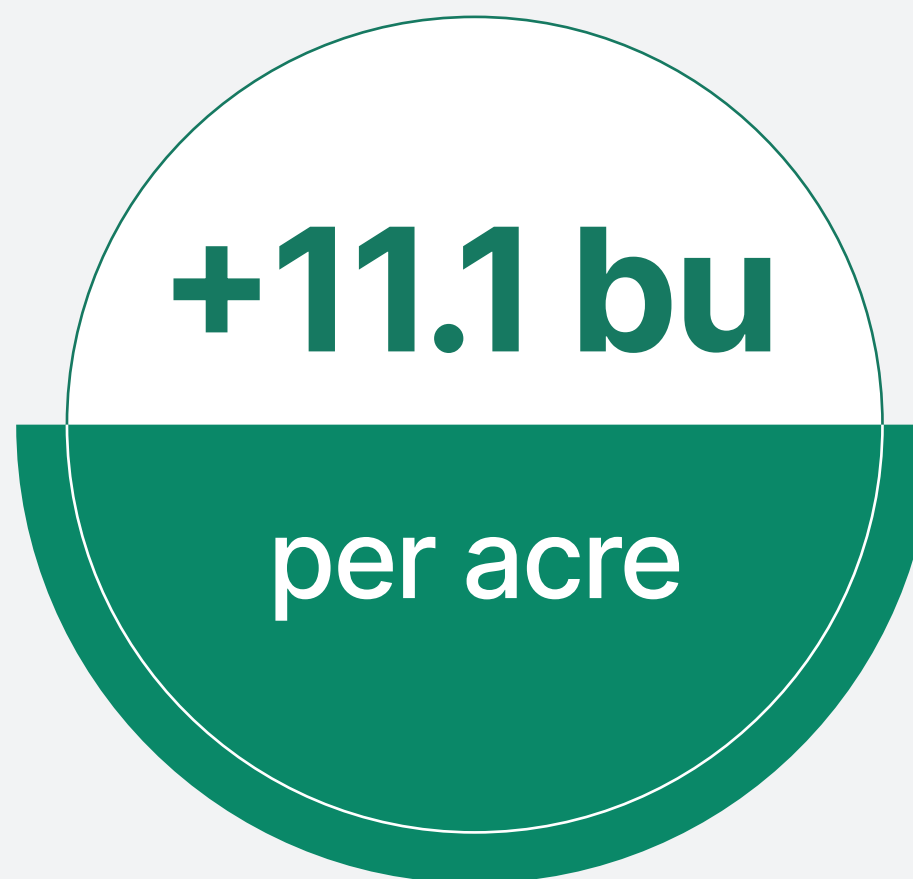
soar Advance Performance

3 quarts/Acre Applied at V4-V6
\$20/Acre Estimated Grower Cost

IRRIGATED TRIALS



DRYLAND TRIALS



Yield Increase

+\$90/Acre
Revenue Increase

4.5X
Cash Returns

Assumes corn prices of \$4.50/bushel

+\$50/Acre
Revenue Increase

2.5X
Cash Returns


Assumes corn prices of \$4.50/bushel

Corn Trial Results

soar Advance Performance

2022-23 Irrigated Research Trials Details

- ✓ Research results of Soar Advanced Performance on corn
- ✓ 16 irrigated farm plots used from 2022-2023
- ✓ 8 dryland farm plots used from 2022-2023
- ✓ Research conducted by Southern Ag Services and Agricenter International



Advanced Performance

Guaranteed Analysis:	
Magnesium (Mg).....	0.50%
0.50% Chelated Magnesium (Mg)	
Sulfur (S).....	4.50%
4.50% Combined Sulfur (S)	
Boron (B).....	0.50%
Iron (Fe).....	0.75%
0.75% Chelated Iron (Fe)	
Manganese (Mn).....	4.00%
4.00% Chelated Manganese (Mn)	
Zinc (Zn).....	2.00%
2.00% Chelated Zinc	
Derived from: Magnesium glucoheptonate, Manganese glucoheptonate, Iron glucoheptonate, Zinc glucoheptonate, Sodium borate, and ascophyllum nodosum	
Non-Plant Food Ingredients:	
Humic Acid.....	0.50%
Fulvic Acid.....	0.20%
Derived from: processed Leonardite shale	

Chemical Dynamics Product Portfolio

[View Soar Bloom Spray Label](#)



All SOAR formulations contain a balanced combination of chelated micronutrients, *Ascophyllum nodosum* (seaweed), plus humic and fulvic acids that activate the production of beneficial enzymes and catalysts within the plant. These biologically active seaweed-based compounds aid in breaking down complex starch molecules (oligosaccharins) providing more available energy to be used in active transport and absorption of minerals. High quality humic and fulvic acids have also been added to the blend to optimize the assimilation and translocation of nutrients. This synergistic mix has been specially formulated to correct and prevent mineral deficiencies and stimulate plant growth, especially during periods of environmental stress.

- ✔ **Soar Bloom Spray**
- ✔ **Soar Advanced Performance**
- ✔ **Soar Micronutrient Mix**
- ✔ **Soar Citrus Mix**
- ✔ **Soar MZF**

[See Soar Products](#)



Chemical Dynamics Product Portfolio

DYNA-FLO™

Our Dyna-Flo™ line of foliar fertilizers contain urea nitrogen to promote nutrition and fast uptake by the plant. The Dyna-Flo product line includes a starter formula, special turf, and ornamental mixes and a straight N-P-K analysis.

- ✓ Dyna-Flo K-Sil
- ✓ Dyna-Flo 5-15-1 (Jungle Juice)
- ✓ Dyna-Flo Humic Acid
- ✓ Dyna-Flo Quick Start
- ✓ Dyna-Flo 11-37-0

[See Dyna Flo Products](#)



Chemical Dynamics Product Portfolio



DYNA GOLD™

Our DynaGold™ line of foliar fertilizers are classified as natural organics. Sodium glucoheptonate, which is derived from natural sugars, is used in much the same way as synthetic organics (EDTA) to form a multiple bond with the metallic ion thereby creating a stable chelate.

These compounds are less apt to tie up in the soil and will stay available under adverse conditions. They enter the plant metabolism more easily and are rapidly absorbed through plant root hairs or stomata and translocate rapidly across phyloem and xylem.

- ✔ Dyna Gold CB Mix
- ✔ Dyna Gold Copper
- ✔ Dyna Gold Manganese
- ✔ Dyna Gold MZF
- ✔ Dyna Gold Vegetable Mix

See Dyna Gold Products



Key Business Practices

As part of our approach to business, Chemical Dynamics offers...

- ✔ **A Commitment to Quality Assurance Through The Guaranteed Analysis of Products**
- ✔ **Expert Customer Service Through The Guidance of In-House Certified Crop Advisors**
- ✔ **Superior Formulations Through Product Lines Such as SOAR, Dyna Gold, and Dyna Flo**
- ✔ **Science-Based Synergies Through The Use of Seaweed, Humic Acids, Fulvic Acids, and Other Biologicals**
- ✔ **Positive Returns on Product Investments Through The Use of Research-Backed Yield Analysis**
- ✔ **Proper Nutrient Stewardship Through the Practice of the 4Rs: Right Source, Right Rate, Right Time, and Right Place**

About Us

For 50 years, Chemical Dynamics has been a leader in value-added crop nutrients, offering products and services designed to help our customers grow

Our History

1973

W.B. Carson founds Chemical Dynamics in Plant City, Florida

Dyna-Gro 779 foliar nitrate product launches and becomes a staple foliar fertilizer for the Florida citrus industry

1979

1982

Fire destroys original facilities by Plant City farmers' market and facilities are relocated to the Plant City Industrial Park

After working for the company since 1980, David Carson becomes the new President of Chemical Dynamics

1990

2002

The SOAR product line introduces Bloom Spray, Citrus Mix, Micronutrient Mix, and Advanced Performance Mix

Chemical Dynamics expands its presence into row crops and hires a sales rep in Mississippi

2014

2023

Chemical Dynamics celebrates its 50th anniversary and further expands its presence www.chemicaldynamics.com

**Take the first step today and reach out
to our knowledgeable local representatives.**

Our team of Certified Crop Advisors is passionate about delivering exceptional support throughout your journey. Whether it's maintaining stringent product quality control or providing hands-on field assistance to tackle any challenges, we are dedicated to being there for our customers whenever they need us.

**Get in touch and unlock the full potential
of your crop production.
Experience the difference our commitment can make.**

**CHEMICAL 50
DYNAMICS YEARS**

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Our Business is To Help You Grow