

## Stimulating Crops. Boosting Response.

**BioLiNE® Gold is a premium quality liquid fulvic acid that is compatible with all agricultural inputs. BioLiNE® Gold is a potent bio-stimulant that enhances crop health and vigor, improving yields.**



### FEATURES OF BioLiNE GOLD

**Highly Compatible:** Easily blended with all agricultural inputs regardless of pH, nutrient concentrations, salt index and active ingredients.

**High Potency:** Powered by extremely small size and high oxygen content. Fulvic acid complexes are protected from degradation and modification through a gentle extraction process.

**Maximum Purity:** Our multi-staged process removes all other humic substances and organic matter resulting in a purified fulvic acid product.

**Long Shelf life:** When stored under normal conditions, BioLiNE Gold does not foul, settle, or change properties like many other organic products.

### BENEFITS OF BioLiNE GOLD

**Increase Nutrient Uptake:** Small size and high exchange capacity allow for direct delivery of nutrients to the plant cell.

**Increase Root Growth & Branching:** By stimulating cell division, eliminating abiotic stress, and exchanging essential nutrients.

**Increase Plant Metabolism:** Increases photosynthetic reactions, improve transpiration rate and intercellular levels of ATP.

**Improve Stress Resistance:** Boost plant health and vigor so it can withstand abiotic stress from drought, heat, nutrient deficiencies, saline soils and harmful levels of minerals.

**Improve Soil Microbial Activity:** Exchanges nutrients and organic molecules between microbes, roots and soil particles.

**Improve Seed Germination:** Nourishes plant post-emergence and helps to fight stresses in earliest stage of growth.

### APPLICATIONS OF BioLiNE GOLD

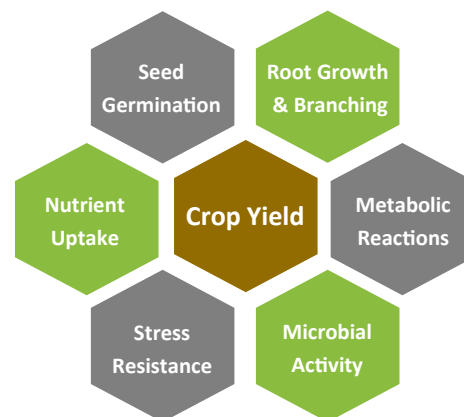
***BioLiNE® Gold is recommended for incorporation into any fertilizer product or program. It can be used on any crop, either grown in the field or hydroponically. It can also be used as an ingredient in seed coatings.***

**Starter/Pop-Up Fertilizers:** 8 - 16 oz/acre; 600 - 1,150 mL/hectare

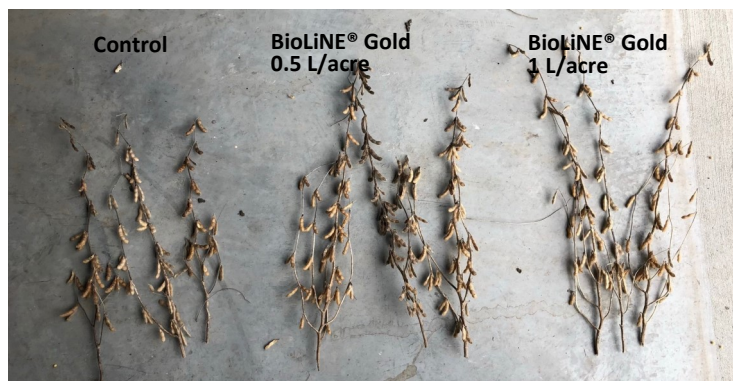
**Foliar Fertilizers:** 16 - 25 oz/acre; 1,230 - 1,850 mL/hectare

**Hydroponic Solutions:** 1/100 dilution (300 ppm)

Note: BioLiNE Gold is recommended for use with all macro and micro-nutrient fertilizers, and can be applied at every application. **For details contact our experts: [info@biolinecorp.ca](mailto:info@biolinecorp.ca) | 519-847-5747**



|                                 | Trial Specs  | Application  | Trial Results   |
|---------------------------------|--|--|---|
| <b>Soybean</b>                  | 20 acres, slit loam<br>DEKALB® RR2 Xtend®<br>Drought & heat stress | Foliar blend w/ Roundup®<br>T1: 1 x 17 oz/acre<br>T2: 1 x 34 oz/acre | Yield: Control = 40 bu/acre; T1 = 47 bu/acre; T2 = 65 bu/acre<br>63% yield increase equated to 30x ROI @ 1 L/acre of BioLiNE Gold<br>Applied 7wks after seeding, increased pod setting (25 to 33/plant) |
| <b>Corn</b>                     | 6 replicated plots<br>loam w. 2.7% OM                              | In-furrow; 10 oz/acre<br>Foliar: 3 x 22 oz/acre                      | 25% increase in root & 52% increase in early plant growth<br>Samples collected 4wks after seeding with bigger size and root wt.   |
| <b>Sweet Corn</b>               | Sunnyvee seeds,<br>loam soil, 4.5% OM                              | In-furrow; 10 oz/acre<br>Foliar: 4 x 22 oz/acre                      | 41% increase in sugar content, 85% marketable ears vs. 38%<br>More evenly sized and fuller ears resulted in 2x marketable ears  |
| <b>Sweet Basil</b>              | Deep Water Culture<br>Hydroponics, Aerated                         | 400 ppm in Hoagland's<br>Nutrient Solution                           | Yield: 133% increase in yield & 157% increase in root weight<br>Increased average weight of harvested basil from 4.9 to 10.8 g/plant  |
| <b>Buttercrunch<br/>Lettuce</b> | Deep Water Culture<br>Hydroponics, Aerated                         | 400 ppm in Hoagland's<br>Nutrient Solution                           | Yield: 47% increase in yield & 63% Increase in Root weight<br>Increased avg. weight harvested from 55.5 to 123.3 g/plant  |
|                                 | Indoor Vertical Farm<br>Rockwool                                   | 400 ppm, EC ≈2 mS/cm<br>Proprietary Nutrient Blend                   | Yield: 44% increase in yield & 18 day reduction in time to harvest<br>Increased average harvest weight per tower from 1 kg to 1.45 kg   |
| <b>Romaine</b>                  | Indoor Vertical Farm<br>Rockwool                                   | 400 ppm, EC ≈2 mS/cm<br>Proprietary Nutrient Blend                   | Yield: Increased by 165% & reduced seed germination by 9 days<br>Increased average harvest weight from 55 g to 146 g per site   |



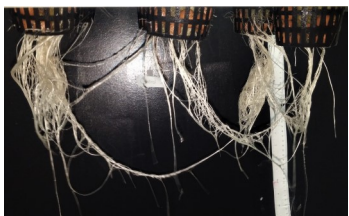
Treated with 1x foliar application with rates indicated above



Control soy roots



17 oz/acre in-furrow soy roots

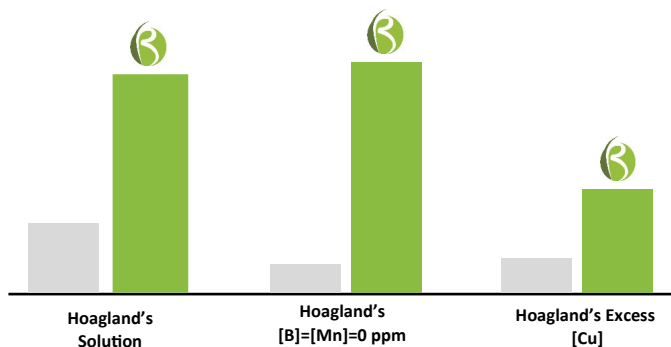


Control Buttercrunch lettuce roots



Buttercrunch lettuce 400 ppm BioLiNE Gold

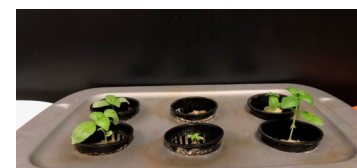
## Dry Weights of Basil with Micronutrient Deficiency and Metal Toxicity with BioLiNE® Gold Treatment



Study with metal toxicity & Boron [B] & Manganese [Mn] deficiency demonstrating the stress resistant properties of BioLiNE Gold. A) [Cu] at 20x recommended rate. B) No [B] or [Mn] in nutrient mix.



A. Excess [Cu]



B. No [B] and [Mn]



A. Excess [Cu] with BioLiNE Gold



B. No [B] & [Mn] with BioLiNE Gold