

Glenorie Hydroponics, Australia

Background

BiOWiSH™-Hydroponic was tested by Joe D'anastasi at his Glenorie Hydroponics lettuce farm in Australia.

The farm consists of seven greenhouses, 246 ft long by 65 ft deep. Many varieties of lettuce, including Green and Red Butter, are grown on 59 ft long Nutrient Film Technique (NFT) tables. Each greenhouse has up to 30 NFT tables which in total can produce up to 27,000 lettuces.

A lettuce growing cycle takes up to 6 weeks, depending on season and weather conditions. Minimum lettuce weight to market is 6 oz.

The NFT systems are irrigated with water circulated through a 1 x 1,056 Gal tank per greenhouse.



Green Butter Lettuce on Nutrient Film Technique (NFT) Growing System

BiOWiSH™-Hydroponic

- Improves yield
- Reduces growth time - more harvests per year
- Improves nutrient availability
- Improves consistency across harvest
- Improves root development
- Better plant health (vigor)
- Improves budding
- Longevity of flowering
- Disease control (research)
- Storage stability

Available Sizes

- 100g/3.5oz
- 1kg/2.2lb
- 5kg/11lb



Existing Hydroponic Nutrient System

The following batches of stock solution are mixed daily and separately with 52 Gal of water on site:

Batch 1

- Pot Nitrate
- Magnesium
- MKP
- Trace

Batch 2

- Calcium Nitrate
- Iron Chelate

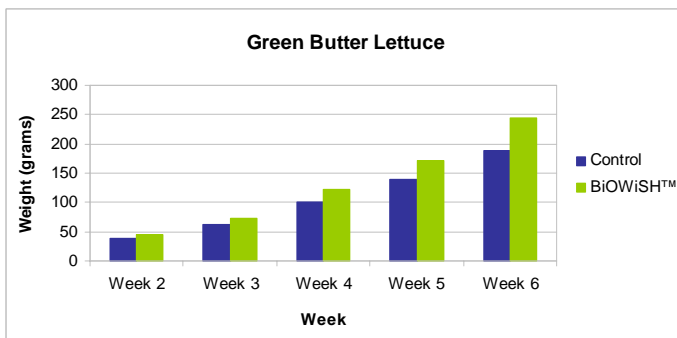
Then, around 3 Gal of each batch is added daily to each of the 7 x 1,056 Gal irrigation tanks to maintain an Electrical Conductivity (EC) of approximately 1.0.

BiOWiSH™-Hydroponic Implementation

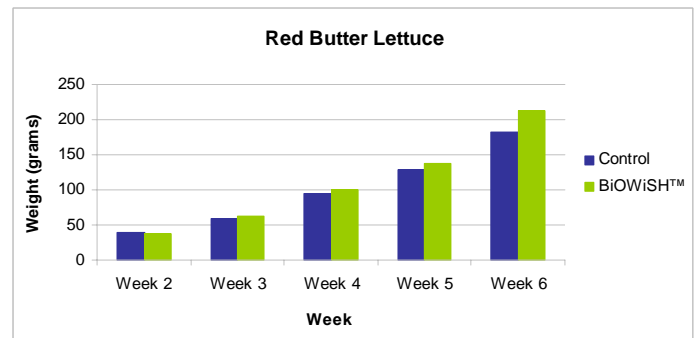
For six weeks, *BiOWiSH™-Hydroponic* was added directly into each irrigation tank at 5 ppm, or 0.7 oz per day/per greenhouse. Total product required per day is 4 oz. The total cost of each fully grown lettuce is approximately \$0.004.

Growth Observations

Lettuce in four greenhouses (two Treated and two Control greenhouses) were weighed on a regular basis throughout their growth cycle, in samples of ten with the average weight shown on the graphs below.



BiOWiSH™ treated lettuce 30% heavier at harvest



BiOWiSH™ treated lettuce 17% heavier at harvest

Implementation Outcomes

BiOWiSH™-Hydroponic treated lettuces were:

- Heavier
- Healthier with lower mortality
- More vibrant
- Higher in sugar content
- Thicker and more consistent
- Harvested more regularly



About BiOWiSH™-Hydroponic

The result of over 18 years of research and development, BiOWiSH™ is a powerful blend of biocatalysts that speeds up biochemical reactions at a rate faster than unaided processes or current technologies. 100% natural and non-toxic, BiOWiSH™ is safe for everyday use in a very diverse range of consumer and industrial applications. Developed specially for the Hydroponics industry, *BiOWiSH™-Hydroponic* is a revolutionary water treatment solution that helps increase nutrient availability, improve plant vigor, and stimulate microbial activity while preventing sludge build-up and problematic scaling in dripper lines, micro-tubes and Nutrient Film Technique (NFT) gully floors.

Contact

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