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Sugar Snap Organic Pea Hydroponic Grow Guide

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Salve Regina University Hydroponic Growing Guide

Sugar Snap Organic Pea (*Pisum sativum*) – MGS2

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Sugar Snap Organic Pea (*Pisum sativum*)

Other variants: Sugar Ann Pea, Cascadia Snap Pea, Sugar Magnolia

Seed Source: Johnny Seeds Catalog, Product ID: 558G

Propagation: Single seed planted in rockwool cube medium in seed tray.

Grow System: The MGS2 system has a lower reservoir tank, which pumps nutrient rich water to an upper collection tray. The collection tray is where the individual plant baskets are placed, with their roots exposed to water. Each basket is filled with clay pebbles to mimic soil structure. The system is on the lower frame with over five feet of height under T-5 grow lamps.

Optimal Nutrient Range (ppm): 980-1260

Optimal pH range: 6.5-6.8

Target ppm: 1250

Nutrients used: 1:1.5 ratio of Floragro 5-0-1 and 2-1-6

Target pH: 6.5

pH buffer solution used: General Hydroponics pH Up & pH down

Light: 16 hours

Dark: 8 hours

Lamps: Sun Blaze 24, 120-volt fixture

Bulbs: 2000 Lumens per bulb

Propagation

Days Dark: 3

Days under Light: 4

Transferred to Grow System on day 7

First Harvest Day: Day 55 in the MGS system

Growing: Hydroponically grown Sugar Snap Peas are a vine-structured plant which require over five feet of overhead height for the vines to grow their structure before fruiting peas. The vines must be supported early in their growth with the use of string. This is done to allow the vine to grow vertically within the frame of the system, and to allow optimal light exposure. The output harvest is low with only 12 snap peas harvested with an average size of 5.5cm after 55 days.

Special Consideration for the Future:

- Attach vines to structure after 25 cm of growth to avoid damage from the collapsing of vines and provide early stability positioned towards vertical growth.
- Wrap vines upwards around the frame of the system to maximize space for the height needs of the Sugar Snap Pea vines.
- Monitor leaves for nutrient deficiencies and adjust nutrients needs to maximize plant health.

