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Salve Regina University Hydroponic Growing Guide: Dolores Chive

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Salve Regina University Hydroponic Growing Guide

Dolores Chive (*Allium schoenoprasum*)- Tower System #3 Hanna Lloyd April 13, 2023

Dolores Chive (*Allium schoenoprasum*) Other variants: Blue Chives, Giant Siberian Chives, Garlic Chives

Seed Source: Johnny Seeds Catalog, Product ID: 3290

Propagation: 5-10 seeds planted in rockwool cubes size small in a seed tray.

Grow System: The Tower 3 system has a lower water basin that pumps nutrient-rich water up the tubes of the tower, where the water bounces off the top cover and trickles down over each cup. Individual plant cubes are put in cups which are then placed in the openings on the side of the tower. The root systems face inward and are exposed to the trickling water. The tower holds 28 plant cups and is exposed to vertical T-5 grow lamps on each side.

Optimal Nutrient Range (ppm): 1260-1540 Optimal pH Range: 6.1-7.8

Target ppm: 1350Light: 1Nutrients used: 1:1.5 ratio of Floragro 5-0-1 and 2-1-6Dark: 1Target pH: 6.5Dark: 1pH buffer solution used: General Hydroponics pH Up & pH Down

Light: 12 hours

Dark: 12 hours Down

Bulbs: VIVOSUN T5-54W 6500K

Lamps: Sun Blaze T5HO-48 **Propagation:** Days Dark: 8 Days under Light: 7 Transferred to Grow System on day 15 First Harvest Day: Day 52 in the Tower 3 System

Growing: Hydroponically grown Dolores Chives are herbs that grow upwards from the root into long, slender, green leaves. Chives produce an oniony flavor. Hydroponic chives are low maintenance and do not require lots of space for growing. Chives thrive in nutrient-rich water and can grow alongside other herbs including basil and parsley. Hydroponic chives are grown best in drip or wick systems that consistently hydrate them. Chives grow best in full light and their leaves can grow up to 12-18 inches in length. The output of hydroponic chive harvests is low with 4 bushels harvested of 12-inch leaves after 52 days.

Special Considerations for the Future:

- Plant 15 seeds in each rockwool plug for fuller chive growth during propagation.
- Frequently monitor nutrients in the basin to prevent algal growth (keep ppm at 1350).
- Trim chives at the root for harvesting to prevent drying and encourage future growth.

