



## OrganaBud

Ascophyllum Nodosum kelp extract  
for hydroponics

**OrganaBud is a source of potash derived from Ascophyllum Nodosum kelp extract. This may aid in photosynthesis and assist in many enzyme actions.**

- OrganaBud is highly stabilized and suitable for use in soils or NFT, and inert substrate such as coco coir or Rockwool.
- OrganaBud has a 3 year plus shelf-life. This ensures complete solubility and compatibility with inorganic nutrients so that the working nutrient solution remains clear, and not cause blocked drippers or build-up in reservoirs.
- Background: The FloraMax test group were tired of "regular" organic additives that would block drippers and filters and cause foul odors in the reservoir. OrganaBud is a reliable additive that satisfies the stringent demands of hydroponic systems.
- Dosage 1-2ml/L (3.5-7.5 ml/Gal) | Pack: 250ml // 1L // 5L // 20L // 1kL

### TESTIMONIES

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*"There's definitely an improvement in overall plant health and vitality. The fruit tastes incredibly clean and distinct."*

*"OrganaBud is very clean in the reservoir and there are no bad odours. Other kelp products make a huge mess in the res, lines and drippers"*

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The ability to move your plants seamlessly from stage to stage without stressing them out is key to achieving optimal yields. Extra care during the early days will pay massive dividends later on. Growers need to be particularly aware of sudden changes in humidity, temperature, light intensity and nutrient concentration.

### GROWING FRESHLY ROOTED CUTTINGS

#### (Hardening Off)

**1. Opening up propagator lid vents gradually** will help wean your rooted cuttings off their high humidity environment and prepare them for life in the main grow room. This process should be done over a few days.

TIP: Eventually placing the propagation lid on an angle will provide a temperature and humidity that is 'closer' to the eventual grow room environment.

**2. Air-pruning:** Placing your nursery pots or propagation blocks on a mesh and raising them slightly off the bottom of the tray will help your young plants to develop better initial root structures—a technique known as 'air pruning' (Fig 6.1). Air pruning dehydrates and kills any roots that try to grow beyond the propagation block

(or pot). This is beneficial because it promotes root growth within the block itself. A block which is fully colonized is more likely to survive planting out into the larger system and provide rapid growth into the vegetative phase.

**3. Do not over-water a fresh transplant.** Simply making sure the surrounding medium is moist will encourage the roots to explore. TIP: Make note of how heavy plants feel when watered. Then recheck their weight daily – if they still feel heavy then do NOT water them.



**Fig 6.1** Use mesh to ventilate and 'air prune' the base of seedlings.

### MOVING TO VEGETATIVE PHASE

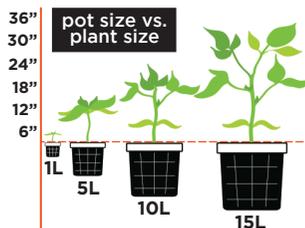
#### When are plants ready for transplanting?

**1. Clones need to be fully hardened off.** Test their capacity to withstand the humidity and temperature used in the 'vegetative phase'. Test for an hour or two to begin with – gradual changes are key!

**2. Must be plenty of air pruned roots on the outside of the propagation cube.** Do not leave it too late otherwise roots will begin to circle the pot and become root-bound. To inspect roots, gently lift the plant by tapping or squeezing the pot on all sides – particularly from beneath. If there are not many visible roots, or the medium is falling apart, then the plant is not ready for transplanting (Fig 6.3).

#### Keys for transplanting

**1. Try to stage pot size appropriately.** A young plant should not look 'lost' in a large pot. Use an intermediate size and allow the roots time to fully colonize all the medium available to them BEFORE replanting into a



**Fig 6.2** Choosing the right pot size is key for enabling roots to fully colonize the medium.

larger pot. Transplanting to an over-sized pot will discourage roots from searching for water. It will also cause the outer medium to become water-logged and prone to water borne diseases such as pythium.

**2. Fabric, breathable pots are recommended for use with coco coir or soil.** Choose pots with a low, wide form. This will, in turn, encourage squat, wide plants.

**3. Ensure that the new medium is flushed and watered with fresh nutrient solution.** Note, Rockwool needs to be pre-soaked for up to 24 hours with nutrient solution pH corrected to below 6.0.

**4. Be careful changing from fluorescent to HID lighting.** When transplants / clones are first exposed to HID, avoid stressing them with excessive light. Either use a dimmable ballast, or lift the lights to a 'safe' height e.g. 600W is 3-4 ft (1,000W is 4-5 ft).

**5. FloraMax Root-XS and Clone Spray** will help greatly to alleviate transplant stress and maximize root growth.



**Fig 6.3** Never transplant until roots have fully colonized the propagation cube

### VEGETATIVE PHASE (Veg)

Creating the right environment is essential for promoting vegetative growth (leaves and roots). The right environment will also produce a short and stocky plant – the ideal 'shape' for indoor growing:

**1. Metal Halide (MH) lamps are ideal** for fast growing plants. They deliver high intensity light (penetrates canopy) with a "blue-rich" spectrum. To avoid stretching, young plants should be positioned close to the light (but maintain minimum safe distance).

**2. Vegetative growth is powered by days of 18 hours** (typically). 24 hour days can be beneficial.

**3. Most species prefer relative humidity of 50-70%** and day ("lights-on") temperatures of 68-82 deg F (20-27 deg C). Keep the night temperature cooler but within about 9 deg F (5 deg C) of the day temperature.

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*OrganoBud's kelp extract is ideal for hydro, coco and soil*