



## INPUTS & MATERIALS ALLOWED & PROHIBITED FOR CERTIFIED NATURALLY GROWN AQUAPONIC PRODUCE

Please note that this list is not exhaustive; it is only meant to provide examples of materials and inputs that are allowed and prohibited. Furthermore, we'd like to emphasize that this list may be updated periodically based on emerging evidence of best practices in aquaponics.

If you have a question about whether or not CNG allows a specific material, input, or product that isn't listed here, please contact [info@naturallygrown.org](mailto:info@naturallygrown.org).

Any products must be used in compliance with national, state, and local regulations.

### **Growing media and system components - ALLOWED**

Allowed materials are subject to review if scientific studies indicate a material poses a risk to the health of fish, plants, consumers, or producers.

- Gravel
- Silica rock
- Expanded clay aggregate
- Perlite
- Vermiculite
- Sand
- Peat
- Coir
- Soil and compost, allowed only when used as part of a hybrid system where the water 'dead ends' (does not recirculate from that section of the system)
- Worms, allowed only if rinsed once upon receipt; allowed to feed on wet corn meal, oatmeal, or cream of wheat for 24 hours to purge their system; and then rinsed a second time immediately before being introduced to the system. Worms added to the system prior to certification may be grandfathered in.
- Rockwool
- Compressed grow plugs made from peat or coir that do not contain synthetic fertilizers
- Rigid PVC (polyvinyl chloride), rated for potable water (NFS)
- ABS totes and tanks (acrylonitrile butadiene styrene)
- HDPE (high density polyethylene)
- MDPE (medium density polyethylene)
- LDPE (low density polyethylene)
- Fiberglass tanks with food grade resin
- IBC totes, new or repurposed: allowed only if (1) already in use at the time of certification, and (2) were either purchased new, or producer has written verification that repurposed totes had only been used for food grade materials
- Cement, as long as it does not come into contact with system water
- Treated wood, as long as it does not come into contact with system water
- Polyethylene film
- Polyethylene tubing
- Acrylic
- Polypropylene
- Polystyrene \*CNG recommends that Producers using polystyrene rafts, take measures to extend their useful life, such as careful handling, sizing rafts moderately

to prevent breaking, and painting the top surface with non-toxic, fish-safe paint to protect from UV light

- Vinyl hoses or liners \*discouraged
- EPDM liners (ethylene propylene diene monomer) \*discouraged

#### **Growing media and system components - PROHIBITED**

- Roofing materials that contain flame retardants
- Compressed grow plugs or plug trays that contain synthetic fertilizers
- Plastics that contain BPA (Bisphenol A)
- IBC totes: prohibited from being added as a new component to a certified system, and re-purposed IBC totes can not be grandfathered in if the producer was unable to obtain verification from the source that it had only previously been used for food grade materials
- Recycled plastics

#### **Inputs for pH Adjustment - ALLOWED**

- calcium carbonate, from dolomitic lime, oystershell flour and other unprocessed
- calcium hydroxide (hydrated lime)
- potassium hydroxide (pearlash or potash)
- potassium carbonate
- potassium bicarbonate
- nitric acid
- phosphoric acid
- muriatic acid
- acetic acid
- sulfuric acid

#### **Supplemental Plant Nutrients – ALLOWED**

- chelated iron
- calcium
- potassium
- OMRI-approved nutrient solutions, if fish-safe
- Worms, only allowed if rinsed once upon receipt, allowed to feed on wet cornmeal, oatmeal, or cream of wheat for 24 hours to purge their system; and then rinsed a second time immediately before being introduced to the system

#### **Supplemental Plant Nutrients – PROHIBITED**

- Synthetic forms of
  - nitrogen
  - magnesium
  - manganese
  - zinc
  - copper
  - molybdenum
  - nickel
  - sulfur
  - boron

**Crop Pest & Disease Management – ALLOWED**

- Physical barriers
- Physical removal
- Traps and lures
- Biological controls such as predatory or parasitic insects
- Diatomaceous earth
- Microbial pesticides used in a manner that is fish safe
- Botanical pesticides used in a manner that is fish safe
- Mineral-based pesticides used in a manner that is fish safe

**Crop Pest & Disease Management – PROHIBITED**

- Synthetic pesticides and fungicides
- Copper-based pesticides
- Petrochemical-based pesticides and fungicides