

Bato Bucket Commercial Package: Tomato and Vine Crop Production



Bato Bucket Growing System

CropKing is a leader in hydroponic growing system solutions. Our Bato Bucket Growing System is the most practical and cost-effective vine crop system for hydroponic farming. Our systems are continuously improved and further developed and feature upgraded equipment. The importance CropKing places on the bottom line and the complete satisfaction of our growers is recognized in the industry and our systems offer many advantages without an expensive price tag.

For vine crop production, we recommend the Dutch or Bato Bucket Growing System. Bato buckets are UV resistant, strong plastic containers that can be used repeatedly for years to come. The Bato Bucket offers quality and security when growing high value crops and is formed with a small reservoir to help avoid over or under watering your plants.

Other features of our Commercial Bato Bucket System:

Triple Injection System: Includes three concentrate tanks, (for micro nutrients, macro nutrients, and pH control), a mixing tank, pressure gauge, solenoid valve, plumbing kit and pump (all pre-assembled, mounted and tested).

Bato Bucket and Nutrient

Delivery: The bato bucket system is suitable for longer growing, fruiting crops, including tomatoes, cucumbers, peppers, egg-plant and melon. CropKing's Bato

Bucket Growing System uses horticulture grade perlite as a growing medium because it is clean and has great wicking capability. Rather than black plastic, our bato buckets are made of tan plastic to help maintain a cooler root zone. This is very important on a hot, sunny day in the greenhouse. Other parts of the system include pre-cut and drilled drain lines that fit directly under the buckets, drip irrigation plumbing with pressure compensated emitters (1 per

plant, 2 per bucket), ½ inch poly feed tube and emitter tubing.

Computerized Environmental

Controls: The iGROW Control System is the brain of the greenhouse. This dedicated unit controls all the environmental equipment in the greenhouse including fans, heaters, vent door, wet wall, lights and CO₂. Maintaining the proper plant environment in your greenhouse is critical to growing a successful crop. This system measures both the temperature and humidity of the greenhouse and adjusts the equipment to maintain the correct set points. These precision controls allow you to improve crop quality, reduce equipment usage and lower your energy costs. This system is also capable of alarm auto-dialing to alert you if there is an issue in your greenhouse. The iGrow Control System has on-screen programming for easy tracking and adjustment of the environment. There are 12 outputs with LED status display indicators and manual override switches. With the addition of "slave units" the iGrow system can be expanded.

Electrical Panel: To help make sure everything works properly, CropKing provides a pre-wired electrical panel that has been tailored to your greenhouse needs. The breaker panel is mounted on a white PVC board, along with the relay box, and the iGrow controller(s). All of these come pre-wired together and terminal strips are provided to connect the greenhouse equipment. This pre-wired panel makes installation much easier and saves money compared to building a panel on site. Just connect the panel to the

incoming power source in your greenhouse and run wire from your greenhouse equipment to the provided terminal strips on the panel. The wiring for this system can be complicated and often misunderstood. This panel can save many headaches and mistakes. These panels and boxes are interior grade NEMA enclosures.

Plant Support System: The vine crop support is the backbone of the crop and must be capable of holding at least 70 lbs per bucket. To meet these requirements, CropKing includes 1.66" diameter steel posts that are concreted into position, with galvanized cabling and all the necessary hardware.

Testing and Miscellaneous Equipment: Included are systems to monitor your nutrient solutions and the environment in your greenhouse, as well as equipment for pollination and nutrient mixing pumps.

CO₂ Enrichment and Control System: The shorter daylight

hours of winter and the reduced amount of CO₂ in the air limit plant growth. Plants have the ability to use more CO₂ during photosynthesis than may be found in the greenhouse atmosphere. By providing more available CO₂, plants can grow faster and more prolific. This system monitors CO₂ levels in your greenhouse and adjusts to your desired set point through the iGrow, which controls the CO₂ generator.

Shade Cloth: The most cost-effective way of controlling greenhouse temperature during the hot summer months is by using shade cloth. It improves light diffusion, reflects summer heat, and keeps

greenhouses cooler. It is manufactured from knitted polyethylene fabric that does not rot, mildew or become brittle. We include the cable and clips for easy installation. 40% white shade cloth is standard. (Different shade cloth densities are available depending on geographic location and local light levels). Aluminet is another great option for shading the greenhouse especially in very sunny climates.

Growing Supplies: The first year of growing supplies is included with your order. By providing these materials upfront, you will save on shipping costs as it is sent with the rest of your system at no extra charge. Your growing supplies include approximately 1 year of hydroponic fertilizer (designed specifically for your water), Rockwool starter cubes, hybrid seed for greenhouse production, perlite growing media, bato bobbins, heat mats and trays, vine clips, truss hooks, a one year subscription for bumble bees, Mycostop, Greenshield disinfectant and insect sticky strips.



Note: Please check with local electric codes, some codes require the constructed panel to be UL listed. Our components are UL listed.

SYSTEM SIZES	WIDTH X LENGTH	PLANT SPACES
Freestanding Greenhouse	30 x 128	870
Single Bay Gutter Connect Greenhouse	22 x 128	720
2-Bay Gutter Connect Greenhouse	44 x 128	1,440
4-Bay Gutter Connect Greenhouse	88 x 128	2,880
6-Bay Gutter Connect Greenhouse	132 x 128	4,320
8-Bay Gutter Connect Greenhouse	176 x 128	5,760
16-Bay Gutter Connect Greenhouse	352 x 128	11,520

Customized Systems are available. Please call 330-302-4203 for additional options.



BATO TRUSS HOOKS

Truss hooks are used to give support to the tomato cluster itself, keeping the truss stem from kinking and cutting off nutrient flow to the developing tomatoes. The J type truss hook has a small, "barbed" type of hook on one end that attaches to the vine twine. The other end has a small hook that goes onto the tomato truss.

3-½ inch Bato J-Type Truss Hook

Terra Cotta, Case of 13000

[Item TRU1300](#)

3-½ inch Bato J-Type Truss Hook

Terra Cotta, Bag of 100

[Item TRU1302](#)

4-½ inch Bato J-Type Truss Hook

Terra Cotta, Case of 8500

[Item TRU2000](#)

PRE-TOM

PRE-TOM is a safe chemical solution which protects the pores of the skin against tomato leaf-green sap (chlorophyll). Apply just a few drops and rub onto hands and fingers prior to suckering, pruning, or harvesting. The green will be easier to wash off and will reduce drying of your hands.

Pre-Tom, 250 ml

[Item TOM1001](#)

TWINE

Poly Twine,

Roll of 1,050 Feet

[Item VIN4001](#)



Blue Vine Twine,

Roll of 10,000 Feet

[Item VIN4000](#)



VINE CLIPS

Vine clips are used when growing tall plants, or vine crops, to clip the plant to a string or trellis support wire. They are primarily used by tomato, cucumber, and pepper growers, but are also used for roses and other tall plants. These are 7/8 inch with UV protection allowing for longer life.

Note: Clips designed for one time use.



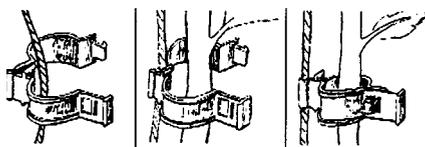
7/8 inch Terra Cotta Econo Clip

23mm, Case of 10,500

[Item VIN8001](#)

23mm, Bag of 100

[Item VIN8003](#)



1 inch Terra Cotta Mega Clip

25mm, Case of 9,000

[Item VIN8002](#)

Growers are advised to use more clips early in the season. Generally, add one clip per week, which equals out to about a clip every 8-10 inches on the plant.

BATO BOBBINS

Designed to hang from the overhead crop support wire.

There is a locking tab in the hood to help secure the bobbin on the wire and keep them from popping off. They come factory wound with 42 feet of white twine. Due to the UV stabilizers, Bato Bobbins can be rewound and reused for several years, but because they are priced so economically, and for sanitary purposes, it is best to replace them each crop. 800 bobbins per case.



Bato Bobbins with 42 foot Twine

[Item TOM1015](#)

TAPENER

Max Tapener Machine, HTB-2

[Item TAP1000](#)

Tape, HTB-2, Large Hole

[Item TAP1002](#)

Tapener Blades, HTB-2, 3 Blades

[Item TAP1004](#)

Tapener Staples, HTB-2, 4,800 Staples

[Item TAP1003](#)



Be sure to use the tapener machine properly. If you are overusing the tapener, and not using enough vine clips to support the weight of the plant, the vine clip will pop open.



HOOK

Top Hook, for Cucumbers

[Item VIN8006](#)

Great for cucumbers keeps the vine from pinching as it gets to the wire of the plant support.