



## Hydroponics Center

Includes:

- Wooden Mobile Cart
- 150 Watt Grow Light
- Water Pump
- 25 Gallon Nutrient Reservoir w/Lid
- A Locked Cabinet
- Submersible Pump
- Air Pump
- (2) Timers
- Hoses
- 8" Pots

### **GROWING WITH AN EBB AND FLOW HYDROPONICS SYSTEM**

THE EBB AND FLOW HGC-52 HYDROPONICS SYSTEM (ALSO KNOWN AS A FLOOD AND DRAIN METHOD) THIS GROWING SYSTEM DOES NOT REQUIRE SOIL, SOIL IS REPLACED WITH OTHER GROWING MEDIUMS. THE PLANTS SIT IN THEIR OWN CONTAINERS SEPARATE FROM THE NUTRIENT RESEVOIR. A PUMP TRANSFERS THE NUTRIENT SOLUTION FROM THE RESEVOIR TO THE GROW TRAY WHERE THE PLANTS ARE LOCATED, SOAKING THE PLANT ROOTS AND THE GROW MEDIUM. THE PUMP TURNS OFF AND THE NUTRIENT SOLUTION DRAINS BACK INTO THE RESEVOIR.

### **GERMINATE SEEDS**

START YOUR SEEDS SEPARATELY IN STARTER PLUGS IN A MINI GREENHOUSE TRAY UNDER FLOURESCENT LIGHT. WHEN PLANTS SPROUT THEY ARE READY TO TRANSFER INTO THE HGC-52 HYDROPONICS LAB.

### **TRANSPLANT TO EBB AND FLOW HGC-52 HYDROPONICS SYSTEM**

THE STARTER PLUGS SHOULD BE BURIED INTO YOUR GROWING MEDIA WHERE THE HIGHEST LEVEL OF THE FLOOD PROCESS WILL JUST TOUCH THE BOTTOM OF THE ROOTING PLUG, LEAVE ROOM AT THE TOP OF THE GROWING CONTAINER TO ADD GROWING MEDIUM LATER. AS PLANT GROWS YOU CAN ADD GROWING MEDIUM TO THE TOP OF CONTAINER TO SUPPORT PLANT STEM.

### **MAINTAIN A CLEAN SYSTEM**

CHANGE WATER RESEVOIR CONTENTS EVERY (2) WEEKS, REPLACING IT WITH FRESH WATER AND NUTRIENT. THE PH NEEDS TO BE MAINTAINED, REQUIRES PH TESTING EVERY FEW DAYS AND ADJUSTING THE PH UP OR DOWN AS NECESSARY FOR THE TYPES OF PLANTS YOU ARE GROWING.

### **RECOMMENDED GROWING MEDIUM AND PH LEVELS**

LECA (LIGHTWEIGHT EXPANDED CLAY AGGREGATE) AND COCONUT COIR IS THE RECOMMENDED GROWING MEDIUM FOR EBB AND FLOW SYSTEMS. YOUR HYDROPONICS LAB WILL REQUIRE A PH (MEASURE OF ACIDITY) TO A LEVEL OF 5.8 TO 6.2; THIS IS DEPENDING ON THE TYPES OF PLANTS YOU ARE GROWING IN YOUR HGC-52.

### **ITEMS NOT INCLUDED**

GROWING MEDIUM, NUTRIENT, PLANTS AND PH READER