Maintaining pH and Nutrient levels

Plant size and the season, cool versus hot, will impact how often you will need to check your bin solution and alter either or both the pH and the nutrients. In the middle of a New Zealand winter with small plants, checking weekly may be sufficient, however, in summer with large plants checking daily may be necessary.

ADJUSTING pH

Ideal pH level is between 5.5 – 6.5

STEP 1: Top up bin with fresh water.

STEP 2: Measure pH with Bluelab pH Pen.

STEP 3: If pH reads higher than 7.0 then add 5ml (1/2 lid) of pH lower to a jug of water, mix thoroughly and then add to Bin. Mix thoroughly in bin.

STEP 4: Re-measure pH. Adjust if necessary.

Measuring of the pH is not an exact science so a final pH measurement of between 5.5 – 6.5 is quite acceptable.

STEP 5: pH Pens should be rinsed with fresh water after use.

STEP 6: pH Pens should be stored with the lid on, keeping the measuring end damp.

ADJUSTING NUTRIENT LEVELS

Ideal EC level is 2.0 – 2.4

STEP 1: pH will have been corrected before nutrients are adjusted.

STEP 2: Measure nutrient level with Bluelab EC Pen.

STEP 3: Nutrients will have been used by your plants according to the plant size and seasonal growth.

STEP 4: If EC is 1.2 - 1.8 then nutrients will need to be added.

STEP 5: Shake nutrient bottles then mix 100ml of Nutrient A into a jug of water from the bin, pour into bin, rinse both the jug and the measuring vessel in the bin and repeat with Nutrient B.

STEP 6: Re-measure bin solution with EC Pen and adjust if necessary.

Handy Tips:

pH

The pH of town water is normally close to pH 8.0.

pH lower needs to be well mixed in bin to avoid concentrating on bottom of bin and skewing subsequent readings.

Add in less pH lower than you think is required to begin with as raising pH is to be avoided.

NUTRIENTS

Be sure to add your concentrated nutrients to a jug of liquid from your bin and then add back into your bin once you have mixed well.

Rinse your measuring container out after adding Part A and B and avoid mixing Part A and B together when concentrated.

GLOSSARY:

Bin: Water/ Nutrient container that contains pump and inlet from channels.

pH: is a measure of how acidic/basic water is. The range goes from 0 to 14, with 7 being neutral.

EC: Electrical conductivity of water - measuring quantity of nutrients available as the nutrients dissolve in water into positively and negatively charged ions.

Jug: 1 Litre calibrated Jug supplied with your My Greens system