



**The Achiltibuie Garden**  
*...let's grow*

## **Achiltibuie Garden tomato liquid feed for hydroponic growing**

A hydroponic feed must supply all the nutritional requirements of a plant because even if you are using a growing medium, this is inert and does not contribute to the nutrition of the plant. Our plant feed is the product of many years' research at the old Hydroponicum in Achiltibuie and is specially formulated to contain all the nutrients need for healthy plant growth supplied in such a way that it is very easy for the plant to take up. The feed is supplied as a set of three concentrates labelled A, B and C. Please refer to the label on each bottle for breakdown of the constituents. Each of these three parts is needed to ensure healthy growth at specific stages of growth and the instructions give details of which part(s) is used at which stage.

We supply our feed as concentrated solutions for ease of transport and storage. They must be diluted before adding to your hydroponic system and you can make up a large quantity of diluted feed at a time because it can then be stored in a lidded container until you need it to top up your system.

In case the constituents interact, make sure that you dilute each of the concentrates separately; for the same reason, it's best not to mix the concentrates together and only to mix the diluted solutions when adding them to your hydroponic system. Both concentrated and diluted feed solutions should be stored in lidded containers in a cool place out of bright light to prevent deterioration due to bacterial or algal growth.

### **Tips on feeding your tomatoes**

Frequency of feeding is determined by the rate of plant growth and the rate of transpiration of water from the leaf area (this is related to the air temperature and humidity). In hot weather, for example, the plant will lose more water through its leaves (transpiration), so it will require to take up more water. We suggest that you cut the strength of the feed by 25% in these conditions with no detrimental effect on the plants.

You can help to reduce transpiration rates by removing the lower leaves of the tomato plants, leaving only the top 75-90cm (2.5 – 3 feet) of the plant with leaves on.

The dilution rates given are therefore a guide and may be adjusted as necessary. Use the instructions given to make up batches of diluted feed for the appropriate stage of growth of your plants. By using the three concentrate solutions you can be sure that your plants are getting all of the essential growth elements.

This Tomato feed can also be used for other high-yielding fruiting plants such as cucumbers and courgettes. Less greedy plants will do well on our General purpose feed, or we can supply dilution rates to allow you to use Tomato feed at lower strength for these plants. All our feeds are available from [www.thehydroponicum.com](http://www.thehydroponicum.com) or by telephoning The Achiltibuie Garden on 01854 622202.

### Dilution rates for different stages of plant growth.

#### Stage 1: from seedling stage (fully expanded seed leaves) to the third true leaf stage:

Desired EC =approx. 3.0 mS/cm above the EC of make-up water

Make a solution using EQUAL QUANTITIES OF TOMATO A & TOMATO B with water as follows

Volume of diluted solution required	Amount of Tom A	Amount of Tom B	Amount of Tom C
1 litre	10ml	10ml	----
5 litres	50ml	50ml	----
25 litres	250ml	250ml	----

#### Stage 2: from 3rd true leaf stage to 1st fruit set (small fruit the size of a pea can be seen):

Desired EC =approx. 5.0 mS/cm above the EC of make-up water

Make a solution using 2 PARTS TOMATO A, 1 PART TOMATO B & 1 PART TOMATO C with water as follows:

Volume of diluted solution required	Amount of Tom A	Amount of Tom B	Amount of Tom C
1 litre	20ml	10ml	10ml
5 litres	100ml	50ml	50ml
25 litres	500ml	250ml	250ml

#### Stage 3: the remainder of the fruit production season:

Desired EC =approx. 3.0 mS/cm above the EC of make-up water

Make a solution using EQUAL QUANTITIES OF TOMATO A & TOMATO B with water as follows

Volume of diluted solution required	Amount of Tom A	Amount of Tom B	Amount of Tom C
1 litre	10ml	10ml	----
5 litres	50ml	50ml	----
25 litres	250ml	250ml	----