

**Postal Address,
Showroom & Delivery
Address**

1 Matos Segedin Drive
Cambridge 3495
Waikato
New Zealand



Phone 07 827 9393

Orders 0800 2000 60

Wayne 027 459 1470

E-mail

stocker@xtra.co.nz

Web Site

www.hydroponics.co.nz

Stocker Horticultural & Hydroponic Supplies (2004) Ltd

Newsletter

Number 251

Spring 2017

YELLOW CROP

As winter draws to a close and the days start to lengthen and brighten we always hit the problem of the crop looking yellow. If only the transition were more gradual our plants would have the time to adapt.

When you think about it, we always get the hard frosty nights followed by hot, sunny, windless days. Its when these beautiful days are preceded by a long run of wet, low light conditions, and all of this coincides exactly with the change of season – this spells trouble for our crops, and our back pocket.

You know the drill!

We all run for the potassium nitrate sitting in the corner, and try to resurrect the plants, (they go to market next week) – and they don't pay well for yellow lettuce etc.

If only we had known someone was going to flick on the summer spring switch in August. Never mind – it has happened now – just deal with it. Give me a call if you are having problems.

Just mix 25g of potassium nitrate in a bucket of water per 2000 litre of nutrient in your main tank, mix and pour the lot in, morning and afternoon for a week. Also add 1 kg to the B drum assuming you have 200 litre tanks.

Remember to restore the nutrient balance in the main tank (when dosing the potassium nitrate) by dumping $\frac{1}{4}$ to $\frac{1}{2}$ of it per week. Watch your plants green up, takes 7 to 10 days.

Some years we don't get even one call regarding this – we are making up this year.

GROWER TIP

I know it's after the event but we have had a very cold, wet winter (and yes I have a large following in the South Island). I have never seen so many growers with fungal problems – collar rot mostly, also leaf spot and downy mildew.

These problems are generally caused by the seedlings being too wet and of course high humidity and wet foliage. If the weather is inclement – cut back the watering of the seedlings. Every third or fourth day may be best. Rule of thumb is if you pick up a seedling

and it has water dripping from it don't add more water. We are all busy – just take 30 seconds to check.

If your crop isn't in the rain why spray. Use Captan spray with Spreadwet if you grow outside, most of my growers are under cover and shouldn't need this spray.

The flip side of it is summer and you will need to add waterings. Fast, unchecked growth produces the best product – end of story.

MAINTENANCE

Looking forward to the spring / summer season ahead. This is the time to clean and get your system ready.

The most important thing is to check the solenoid diaphragms – especially the acid. The acid one works in the most aggressive environment and should be looked at yearly. The reason that we put a smaller acid container in all of our new installs is the fact that its more likely for the acid valve to fail; with the contents of the drum being dosed in. On large

systems, for the acid, have 2 valves in series – very cheap insurance.

As far as the tank room is concerned – clean out the A and B drums, lines and filters – might save trouble when things get busy as we move towards summer. Out in your system be sure that the nutrient has a clear run down the gullies. We should stick to the principles of Dr Cooper's method of growing NFT (nutrient film technique). Any ponding i.e. depth of nutrient in the

gullies and you will have problems with Pythium etc. We should have a film of nutrient moving along the gullies. Of more concern than algae etc in the gullies – which is unavoidable is this free movement of the nutrient solution. We used to promote the slope as 40:1 but now find this is insufficient. 150 mm over a 6 metre length of gully is minimal – 250 mm or more would be ideal.

If you think harvesting etc would be difficult – if possible 'slope the ground'. The maximum distance between gully supports has always and will always be 1500 mm, any more and the gullies sag under the weight of the crop (causing ponding).

You will be reaching for the Vectobac, hydrogen peroxide and Foschek. If 'lucky' you will escape without total crop death!

BEST PRACTICE

Fast growth is what we in hydroponics specialize in. For lettuce – from seedling to market 6 weeks in summer, 8 in winter. Our growers produce 7 to 8 lettuce per hole per year.

How do they do this? They use our nutrient (and include agronomix and potassium silicate) made specifically for summer or winter and use our dosing systems – the main tank is of ample capacity and well aerated. They hold the pH around 6 – the CF will be in the 3 to 5 range in the heat of summer (the greenhouse is well ventilated) and with plenty of available shade cloth. The greenhouse covers are clean. They carefully monitor everything and run a CF of 14 in winter with some semi outdoor and with some crop varieties getting as high as 16 – 17 CF.

Most growers will dump $\frac{3}{4}$ of the nutrient monthly – this is to restore the balance of available nutrients, and

it prevents the build up of sodium. Most growers know how much sodium is in the raw water. In our systems 30 mg / litre is the maximum you should let your tank get to – and at this level you will be getting some sodium burn on the leaves.

The grower will monitor their crop closely. Aphids are an unavoidable pest in lettuce crops, sensibly monitored and controlled we have learned to live with these pests – they just need to be kept right down. More about this in the 'summer' newsletter.

Our growers run a diary – noting things of importance i.e. weather, temperature, humidity etc any sprays and dumping times, picking, planting etc change from winter to summer mixes, crop problems – solutions etc, CF, pH, nutrient, leaf tests and formulation changes + marketing info all valuable information for next year. Gullies have plenty of slope.

HAPPY BIRTHDAY

We were 13 years old on the 20th of August.

I have enjoyed every day owning and running the business, and look forward to many more happy years into the future.

Please pay accounts: Directly to our bank A/c 06-0317-0725026-00 (we NEED your **grower** name on the statement) or you can Mail to Stocker Hort & Hydro, 1 Matos Segedin Drive, Cambridge 3495.