A Step Forward : Moving from AllHydroponics to ScienceinHydroponics.com

Through the past few weeks I have been meditating about the current limitations of the blogger platform and how it makes my writing and customization options smaller and the look of my blog less professional. Due to the fact that I intend to start writing more and expanding this blog it becomes evident that I will need a much more powerful blog hosting platform and blogger seems to be limiting instead of helping my efforts in this regards. For this reason I have taken the decision to move my blog from its current blogspot home to a new self-hosted domain which I will use from now on to post new articles and releases of hydrobuddy.

This new website – scienceinhydroponics.com – will be the new home of my blogging effort in the area of hydroponic crop production and research. I will stop posting new articles on blogger and the old blogger website will start redirecting to the new wordpress based blog today. The idea of this new blog is to allow me to customize my website as much as I want and to be able to exploit the full potential of my web presence through the use of a self-hosted domain. In the future I hope that this move forward will make my content more professional and my efforts more worth-while. Future versions of hydrobuddy will now be released and maintained on the new wordpress blog and the previous blogger implementation will not be maintained anymore.

Of course if you have linked to my old blog the pages will not be deleted but they will cause automatic redirection towards my new domain. However the RSS feed will stop being updated so feel free to subscribe through my new blog’s RSS feed (links available on the top right corner of the blog). There are also

now several buttons you can use in the bottom of each page to share the contents of the posts on facebook, twitter, etc and a Printer friendly function that will allow you to easily print my blog's contents without any of the menus, etc. I hope that you will greatly enjoy this new blog which is a milestone achievement for me and the start of a new era for me as a much more professional blogger :o)

Feel free to leave any comments or suggestions ! :o)

Ion Selective Electrodes in Hydroponic Culture

Currently, hydroponic growers rely on a combination of electrical conductivity and pH measurements in order to assess the quality and durability of their hydroponic nutrient solutions. However, many are unaware that hydroponic gardening can be much furtherly enhanced by the addition of ion selective electrodes.
In a certain sense, all hydroponic gardeners have used an ion sensitive electrode since the pH meter they use to measure the concentration of $H_3O(+)$ ions is actually selective to that ion. Imagine if every time you read pH you had interference from all the other ions present inside the hydroponic solution. Nonetheless, there are currently a large variety of ion selective electrodes available and many of them can be used in hydroponic gardening to accurately control the concentration of several elements.

For example, ion selective electrodes with very good selectivity and little interference exist for the nitrate ion. These type of electrodes can be purchased from many manufacturers but can be easily found here. For just 229 USD,

the grower is able to accurately control the amount of nitrate ions present inside the hydroponic solution independently from other nutrients.

By measuring the potential difference given by the electrode when the solution is prepared, the grower is able to easily detect and graph changes within a certain growing period. Best of all, since the ion selective electrode gives a real measure of ion concentrations, the grower is able to resupply spent nitrogen without unbalancing the hydroponic growing solution.

Ion selective electrodes exist for a variety of ions including nitrate, ammonia, phosphate, potassium, iron and copper. This technology will prove to be the future of hydroponics as it will guarantee the grower the ability to accurately control and resupply the exact amount of nutrients needed by his or her growing plants. These electrodes can also be easily wired to computer software in order to monitor nutrient use 24/7 (below a display of several ion selective electrodes)