



Visitors check out the first commercial aquaponics operation in New Zealand, at Tasman Bay Herbs.

Beyond organics

By Mike Nichols

The Berrysmith Foundation held an open day at Tasman Bay Herbs near Motueka to demonstrate the progress they have made in developing the first commercial aquaponics unit in New Zealand.

One of the attractions of aquaponics is that it is extremely environmentally friendly. All the mineral nutrients used by the plants are organically derived from the fish, and it is not possible to use any toxic sprays because of potential dangers to the health of the fish, so it was assumed that such a system would find favour with the organic certifiers. This has not proved so,

as the organic producers insist that organic production must be grown in soil.


So what of productivity? At Riwaka during the summer months the lettuce and herbs produced under the aquaponic regime in both NFT and deep flow systems were as good or better than that produced under a conventional hydroponic system, but during the winter (the greenhouse has no heating) productivity in conventional and aquaponic treatments were similar under a deep flow system, but in the NFT gutters productivity was lower in the aquaponic treatment. This has been attributed to the low temperatures reducing the activity of the fish, with less nutrients therefore being available.

“One of the attractions of aquaponics is that it is extremely environmentally friendly.”

So what of the future? The Europeans insist on using soil, whereas in North America it is quite acceptable to use organic media such as peat, and to re-circulate the organically derived nutrient solution.

Of course aquaponics goes one step beyond this, by having no medium at all, and considers itself to be at least one step better than organics, because it not only fulfils the two key organic criteria and unlike organics is also sustainable, hence the name **BEYOND ORGANICS**.

The instigator of the development at Tasman Bay was Ashley Berrysmith, a Massey University alumnus, and New Zealand entrepreneur of the year in 2008. However the full story of this new, for New Zealand, development goes back to 2003, when one of the speakers at the International Soilless Culture Symposium held at Massey University, Charlie Schulz from the University of the Virgin Islands, presented a paper on aquaponics and the growth of basil. This was followed by a section on aquaponics at ICESC-2005 in Singapore which I attended, and was followed early in 2006 with my visit to the aquaponics project at the University of the Virgin Islands. This resulted later that same year in me contributing at a series of workshops on aquaponics in Queensland, New South Wales and Victoria. Among the aquaponics specialists speaking at these workshops was Dr Nick Savidov from Alberta, Canada, who was then invited by Massey University to speak on aquaponics in Auckland and Palmerston North.

In 2008 the Australian Aquaculture Congress was held in Brisbane, and this included two half day sessions on aquaponics. It provided the Berrysmith Foundation with the opportunity to find a specialist consultant in aquaponics. Don Grant and Yoka De Houwer of Tasman Bay Herbs were then approached by Ashley, and they were interested in being involved, so an aquaponic green-house operation was established early in 2010 at Riwaka on their property by the Berrysmith Foundation. 

PLK Hybrids



KAURI (R5957)

- Very high yield potential.
- Very firm bulbs with excellent storage potential.
- Globe shaped bulbs with good size uniformity with the majority in 70-90mm range.
- Attractive shiny skins with good retention. Develops good early colour.
- Averaging 3 or more good skins.
- PLK maturity.
- Very vigorous plant and strong root system.



PLUTONAS (R5946)

- High yield potential.
- Firm bulbs with long storage potential, equivalent to OPs.
- Very good shape uniformity with a high percentage of globe shaped bulbs.
- Good skin thickness and retention.
- Maturity the same as M&R Regular and Kauri.



Terranova

SEEDS

Upper North Island Alan McKee, Mobile: 021 956 701, Email: alan.mckee@tseeds.com
 East Coast & Manawatu Graeme Jackson, Mobile: 021 396 359, Email: graeme.jackson@tseeds.com
 Ohakune & Horowhenua Kathryn Wells, Mobile: 021 475 482, Email: kathryn.wells@tseeds.com
 South Island Roger Banfield, Mobile: 021 352 764, Email: roger.banfield@tseeds.com
 Auckland/Protected Cropping Ingrid Ennis, Mobile: 021 435 493, Email: ingrid.ennis@tseeds.com

Freephone: 0800 TERRANOVA (0800 837 726)
 Customer Service: Ph: 09 275 1919 Fax: 09 275 2021
www.terranoaseeds.co.nz

Thinking onions? Think **Terranova**

LK 1598