

Hydroponics

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Once a hydroponic system is up-and running, it is fairly cheap to maintain as fewer inputs are needed compared with conventional, soil-based cultivation. For a start, it is less labour-intensive. As water is recycled, hydroponic systems conserve water by as much as 90% compared to field growing conditions. And because it's a closed system, with no nutrients leaching into soils, there are good environmental arguments for going down this route. Nutrient-rich water is pumped, sprayed or dripped onto plant roots in a controlled environment. At Cae Gwyn, the water is pumped along troughs, like guttering, which are raised waist-high on benches- this is called an NFT system (nutrient film technique). We also grow in containers containing perlite or clay balls - using a drip system.

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Now for some photos of some of the plants we have grown hydroponically
^ Basil ^ Lettuce Cabbage greyhound ^ Peppers ^ Some flowers ^ Pakchoi ^ Wombok (chinese cabbage) ^ Cress with a strong peppery bite to it. ^ Strong growing Rosemary ^ Paraguay- ^ As lettuces are harvested ^ !young seedlings take their place. Sylvesta a butterhead type lettuce Lettuces seem to like the cooler environment! Feverfew producing strong aromatic leaves. A bumble bee tucking into a late calendula feast !

^ Mizuma flower ^ Wombok flowers ^ Echinacea growing hydroponically are used medicinally - not just the root - and so we are experimenting to see how it does! This is our first flower- July 2007 ^ Also growing well - green basil - can you smell it? ^ strong The flat green beans have done very well and it looks like a case of pick and come again and again! and celery grew extremely well - either eaten raw when young or used in stews, casseroles and soups. Winter Density Cos Vienna Crisphead Minutina ^ Raddiccio (chicory) Choisum hon tsai tai Pak choi just waiting to be cut and stir fried! Hydroponic corn Purple Russian Tomatoes Unusual colouring - but very tasty! 2010 summer growing ^ Flowers and herbs ^ Sweet melons ^ Very hot chinese chillies
2012 update After a very late and very wet summer ^ and the hydroponic unit was full of tomatoes ^ Lovely red toms and yellow pear toms, but also far too many green ones The foliage started to take over the polytunnel ! Fortunately we had buyers for the green ones - to make green tomato chutney ! Along with marrows grown in the herb field. and with young winter lettuce plants coming on.

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