# A FEW SECRETS TO GROWING GARLIC IN THE TROPICS

*Sharing a grower's journey, with **John and Shirl Everall***

This Guide relates some of the learnings that John and Shirl Everall have collected along their journey to cultivate abundant crops of garlic in the Julatten region of Far North Queensland (Australia). This can be a challenging environment: the temperatures are mild year-round, but rain can be torrential and is highly seasonal (90% of the 2100mm falls in just 4 months), and soils are generally heavy clays poor in organic matter.

## The right variety

John and Shirl have been growing garlic for many years. After a number of failed crops, John and Shirl made their first major step forward by discovering the difference between day-length critical and day-length neutral varieties.

John recalls: "We had looked for advice in many sources, but we had not consulted the Seed Savers Handbook because of course garlic is a bulb, not a seed. But there is plenty of information in the Handbook on all sorts of edible plants, and garlic has a couple of very informative pages. We learned that garlic from the higher latitudes, where they have a big variation in daylight over the year, responds to day length. That's where our main problem was. We needed to source varieties that were day-length neutral."

He says they started with a purple garlic, perhaps Mexican, and started to get good results. They have been using this stock for so long now that he doesn't know any more what the specific origins were. This variety is "day length neutral" and is the best one to grow here in the tropics.

## Planting

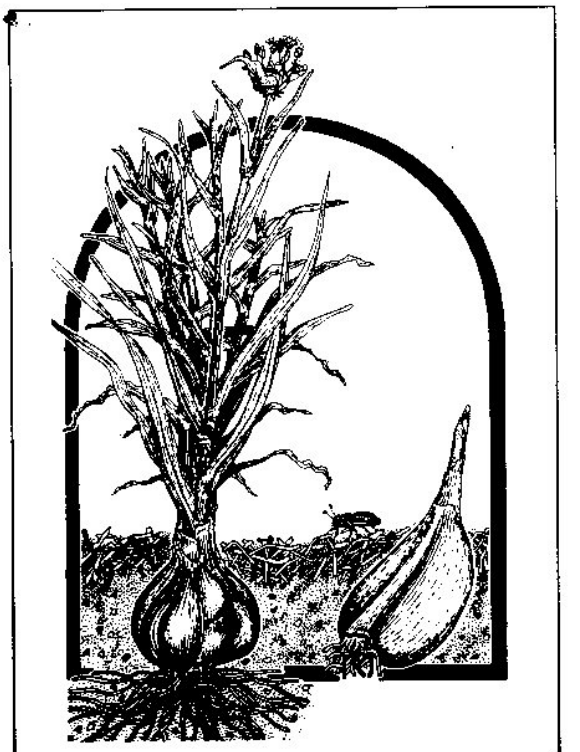
John and Shirl plant according to the moon. "There's a root crop planting window right during the full moon phase. We make sure we're ready when the moon comes in."

Garlic is a very heavy feeder. As a preliminary before sowing he puts lots of organic matter into the soil. John notes: "For our crop, I prep with perhaps 1 and a third buckets of chook pellets in a garden bed, plus dolomite, cow poo and compost." John uses organic life pellets, not just ordinary chook poo, as there are many more nutrients available to the plants. When the beds are fully fed, the soil should feel loamy, well drained, and have close to neutral pH (7).

**GARLIC**
AMARYLLIDACEAE

***Allium sativum*** – allium was the Roman name for garlic; sativum means "cultivated" in Latin.

**Origins:** It is believed that garlic originated in the mountains of Central Asia (Kazakhstan, Uzbekistan and Turkmenistan). It was found wild in the Altaic Mountains of Siberia and also



*1: from The Seed Savers Handbook (Fanton, M & J. 1993)*

John and Shirl target 144 plants in a 12 x 12 grid for their crop. Rows are set at 300mm and each clove is spaced no closer than 150mm down the row (planting area = approx. 1.8m x 3.7m). John points out that, if the plants are crowded any closer than this, they will be unable to get sufficient feed and the result will be small bulbs.

Sowing is undertaken using the best cloves from the previous year's harvest. The seed clove is pushed right down into the ground so that the top of the clove is a good 2 inches (50mm) under the soil.

## Feeding and tending

Once the plants have shot up, they are ready for their first feed. John uses a fish emulsion and kelp for this first boost. Later on, as the plants get taller, it is time for blood and bone. "But be careful: blood and bone is very strong and will burn the fine white feeder roots and stems if it comes in direct contact," John cautions.

To avoid problems, he first lays down a covering of mulch, then applies the blood and bone, and then covers that with more mulch. Watering will then drain through the blood bone, speeding the process of breaking down compost and feeding the plants.

And because of the mulch cover, there is less danger of splash burns on the stems and leaves. He does two blood and bone feeds during the growing phase. During this time, he advises to weed out any other seedlings or volunteers that come up. The garlic takes priority and does not like competition.

## Harvest

Aligning with the moon, John and Shirl plant in May and harvest in September. Thus, harvest is 4 months after planting, immediately, AFTER the next root crop moon phase. This is before the moon is dark, and is in a 'dry' sign. Aries, Leo, Sagittarius, Gemini and Aquarius are the dry signs. "This is when crops harvested from the soil will have the best storage qualities. If you want to keep bulbs back for the next 6 months, make sure you harvest with the moon in a dry sign."

Leaving the crop in any longer than 4 months (in our climate) often causes the cloves to sprout up the stem and sometimes inside the bulb. This makes a mess of the harvest and diminishes the yield.

When harvesting the cloves, there are often some cloves that have leaned well away from the main bulb. John calls these the 'sprouters' and he tries to breed this tendency out of his stock. He is careful not to replant: "Sprouters go straight into the kitchen…much better to eat them than plant them." The next cloves, still on the outside of the main bulb (but not sprouters) will be the seed cloves for next year.

## Post-harvest: bed recovery

After the garlic is harvested the garden beds are immediately sown with climbing beans or carrots as they seem to love the soil left behind by the alliums. "This gives us a nice second crop," John explains, "but it's all in rotation, to work the soil properly." Once the second crop is brought in, before the Wet, the bed can be sown with a green manure or heavily mulched to help rebuild soil health in fallow. The bed needs to rest for at least 3 years, ideally 5, before going back under garlic.

## More information

These ideas have been gained after many years of trial and error. We thank John and Shirl for sharing their knowledge.

For more information please get in touch with the Julatten and Mount Molloy Local Seed Savers via: secretary@jamarr.org.au

The Seed Savers Handbook can be ordered from:
http://seedsavers.net/shop/home/tools-resources/the-seed-savers-handbook/