

## TerraCottem - Can you afford to fail?

Ecological restoration in Australia, and around the world, is more often than not directly involved with reinstating endemic plants to an area that has suffered some form of environmental degradation. Often the plants are specially grown from locally collected seed and a lot of time, effort and money are required to propagate, grow on and then plant out these plants, often into very hostile situations. Although these plants are usually specifically adapted to surviving local conditions, a range of factors may preclude them from surviving or reaching their full potential. The soil conditions may have been radically altered, the hydrology of the site changed, competing exotic plants and animals taking over, all contribute to often massive failures for these small plants, and therefore the failure of the restoration project.

This problem of plant establishment is not a new new one. Many very qualified people have trialled enormously varied ways of improving the success of planting in difficult locations.

One such person to tackle this problem head on was a Dr. Willem Van Cotthem and his team from the Laboratory of Plant Morphology, Systematics and Ecology at the University of Ghent in Belgium. Since the late 1980's he and his team have strived to find a soil conditioning product that could be taken anywhere in primary work centred around trying to allow the successful reforestation of desertified regions in West Africa. After years of rigorous testing and research they finally developed a product which has been called "TerraCottem".

So what is TerraCottem you may well ask?

TerraCottem is made up of a scientific blend of over 20 different substances all of which have been carefully analysed and tested with regard to plant growth benefits. Specifically it is:

- a blend of the best-performing organic hydroabsorbent components which increases the capacity of growing media to retain and provide water and nutrients;

- a starter component of soluble and slow-release mineral and organic fertilizers to play an important role during the initial plant growth phase, and for many months after;
- trace amounts of a root growth activator which encourages extensive root development in the initial growth phase;
- and a carrier material which retains water and nutrients, allows for homogeneous distribution of all components and contributes to better soil aeration.

The development of this product was originally done on a non-commercial academic basis, enabling the creation of the mix now known as TerraCottem. Having been to lectures given by the Professor I am convinced it is far, far more than "water saving crystals with fertilizer". Research has shown that hydroabsorbant components alone will not greatly benefit plant establishment. Of more importance is the presence of growth stimulators in conjunction with the humidifying and mineralising effects of the hydroabsorbant polymers. The documented pH buffering of TerraCottem can also be beneficial to plant establishment where the soil pH is outside of optimum growing range.

All in all, numerous trials and field results have demonstrated that Terracottem can drastically increase plant survival rates, reduce stress in times of drought, promote deeper more extensive root growth, reduce water and fertilizer inputs and improve microbiological activity and soil aeration.

And perhaps the best part... a portion of all commercial sales of the product in the developed world go to "TC Dialogue" - a non profit foundation established by Prof. Van Cotthem to help communities in developing countries to become self sufficient, improve their environment and increase their standard of living through the use of TerraCottem in agriculture, forestry and restoration projects.