

Improving nutrition with the Thursday Island Donut Gardens



• *Student topping up a garden*

Thursday Island in the Torres Strait is a difficult place to establish a garden.

Local educator and horticulturalist George Ernst has developed a garden system that has produced fruit, vegetables and spices, and which can also be adapted to grow ornamental and medicinal plants.

The name “donut” refers to the round mound of mulch and compost that reduces weed growth, retains moisture and breaks down to provide plant foods. The distinct shape and relatively small size, between 3 to 4 metres across, also defines these gardens.

Each garden has a central fruit tree like a grafted lemon or mango tree and three or four other plants like pineapple, chilli, pawpaw or pumpkin. The key to deciding which plants to cultivate in the garden is that the same management needed for the fruit tree will also support the growth of the other plants which will produce a crop in a shorter time than the fruit tree.

This effort is a team event. The plants cost money and the garden beds require regular maintenance. George has some financial support from the local Technical and Further Education (TAFE) college, the local council and ACIAR, but the major effort is provided by dedicated and enthusiastic locals including grade 11 and 12 students.

The use of mulch, largely in the form of chipped fallen and pruned tree branches supplied by the council, is important. To ensure a constant supply of nutrient, chicken manure and small amounts of inorganic fertilizer are incorporated as well. This garden system can be adapted to reticulated water or stand alone irrigation. Shade and windbreaks can be constructed for particular plants.

Within the first 18 months, 48 garden beds have been planted. The project aims to improve the environment and provide a range of healthy foods. The beds are located on public land and each site is chosen carefully to enhance the appearance of its surroundings and at the same time, not interfere with pedestrian and vehicle access, powerlines and underground services. Each bed is accessible to the public and includes painted pegs that provide information such as the name of the fruit tree, who planted it and when. Additional information such as at the stage of maturity when the crop can be picked, may also be displayed.

Most of the garden inputs can be sourced locally and apart from labour, upkeep costs are minimal.



• *Wongi tree with chilli and pumpkin plants*



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The factsheets are intended to provide information on some of the most nutritious leafy green vegetables suitable for growing in tropical areas.

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