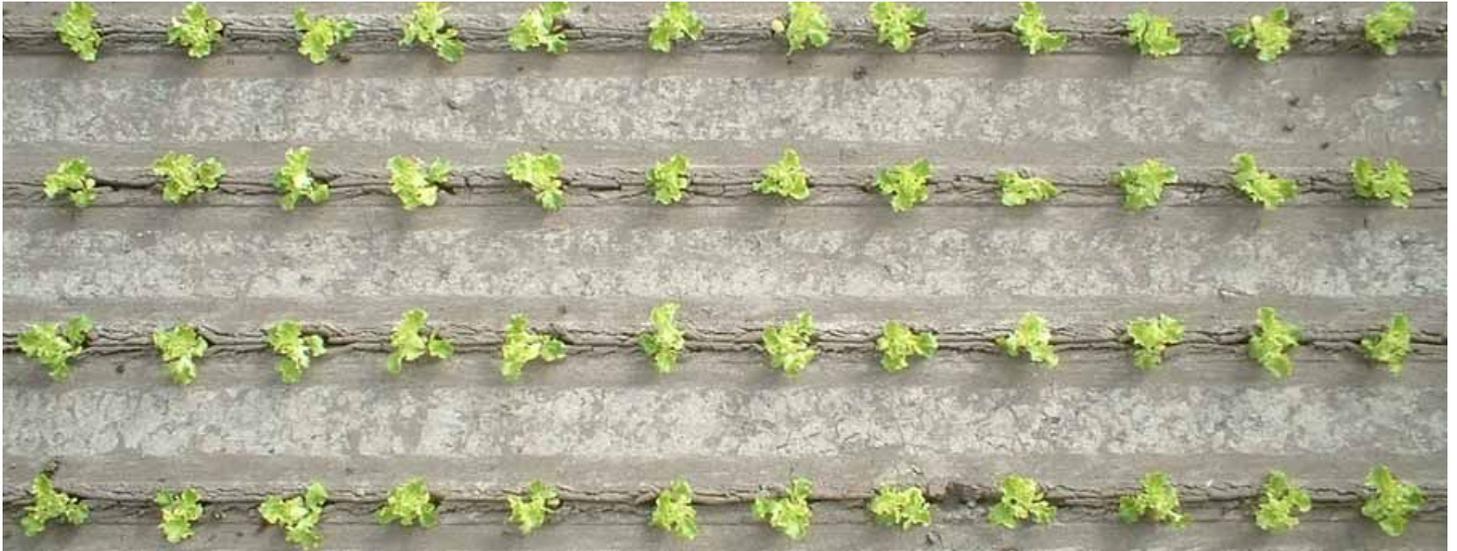




TRANSPLANT SYSTEMS

Phase 3 - Transplanter development



In 2006 the Australian Commonwealth's New Industries Development Program was designed to assist Australian agri-business to become more competitive by increasing its capacity to identify and respond to demands from new customers in new locations for new products, technologies or services by (a) producing new products or different varieties.(b) using currently ignored by-products or (c) changing the form, presentation and / or delivery of traditional products and services to better meet customer requirements. Transplant Systems considered this as an opportunity and applied for a competitive Pilot Commercialisation Project funding grant. The application was successful.

The grant was confined to the development of an automatic planting machine capable of planting lettuce seedlings in high density populations on prepared growing beds. The grant was for A\$ 100,000 matched by like for like expenditure.

Development of an automatic planting machine commenced in early 2006. The first trial of a Compact High Density Transplanter was undertaken at Covino Farms in Seaspray, Victoria on August 30th 2006. The machine was a 6 row planter taking seedlings raised in the square TS 144 cell growing tray. Seedlings were supplied by Boomaroo nurseries in Lara Victoria.



The machine was allowed to plant 200,000 seedlings at full capacity and then was returned to the workshop for a study of wearing parts. A second machine was then constructed, a 4 row machine for commercial sale complete with standard frames to hold the trays of seedlings. The second machine was sold to Covino farms in October 2006 and continues to this day planting millions of seedlings each year.

In October 2008 Transplant Systems started export market promotional work in conjunction with Austrade and demonstrated the HD auto planters heavily in England, Holland and Germany. Exports started December 2009 with machines sold to England and Holland. 2010 saw further growth in both domestic and export sales. During the second half of 2010 we strengthened our European operations but demand and logistics have proven extremely difficult and as of April 2014 we have closed our European manufacturing base. Please contact our managing director Alan Rogers (details on CONTACTS page) should you require more information on this.



This machine is what we refer to as a selector model. (CR2) It will ensure planted rows are complete with a full complement of plants .. no misses. It does this by optical sensor recognising when the picking fingers prove a seed has not germinated in the cellular tray. The plant receiving cup will remain closed while another opens to deliver a held seedling to the planting shoe. The function is repetitive and continuous. Our automatic planters are offered with or without the selector. device.

Of critical importance is the reliability of the automatic planting machine and the level of field support available to the owner / grower. Planting automation is not

just about buying an automatic planting machine. It is committing to an automatic planting system which encompasses (a) ground preparation (b) the seedling supply nursery (c) the supplier of the automatic planting machinery. All three segments are paramount to the success of the system and the crop to be planted. The grower must prepare the planting bed correctly. The farm or wholesale nursery must produce seedlings to the required specification .The machinery supplier must provide reliable machinery with field support.

