The Challenge of Change Part II

At the Tobacco Workers Conference in 1990 in Nashville, my talk was titled "The Challenge of Change", and referred to the transition to the float system.

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The Beginning

George Todd, President of Speedling Incorporated, had a vision in 1985 to convert tobacco bare root transplant production to containerized production.

I was named the Tobacco Project Manager for Speedling, joining in 1986. I am not new to this technology. I was there at the start.





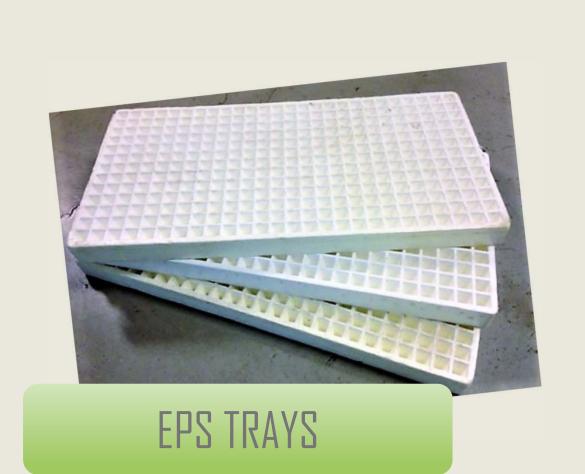
The tobacco float system works so well because the EPS tray easily floats on water with the plant absorbing the water and fertilizer solution through the drain holes. The plants accepting constant watering are clipped to control growth and for uniformity.

Early resistance to float system production was based on the idea that tobacco plant roots supposedly don't like wet conditions, the plants were smaller than traditional bare root plants and wouldn't survive out planting and the system was too expensive.

Change is never easy.



The problem



Cost & Investment • Durability & longevity = 3 seasons • Replacements, circa 33% pa • Contamination: product and process Yield **Environmental contamination EPS** Animals Trays Water **Prevents growth** Land **Planet** Design • Root to tray contamination Climate Change • Tray to root contamination **Human population** Health risks Burning results in styrene monomers, highly carcinogenic. Poor image & reputation



The early days...

- By the early 1990's Speedling was manufacturing almost 2,000,000 EPS trays a year. My Project and I had grown into a Tobacco Division, and then a Horticultural Division
- By 1995 US growers had converted most of the transplant production to the float system. We had no inkling of a pending environmental issue the systems were all new.
- ► The system was being trialed and was soon adapted worldwide.
- We still had not considered an environmental issue with tray disposal.
- The environmental dark cloud was building, words were started to be whispered. "What is happening to the used trays?" The environmental issues were not apparent back then.
- Speedling's nursery worn trays were steam sterilized, broken up and used as an aggregate in the soil mix they used internally.
- One grower told me he burned the trays at a 'wiener roast' with the kids. Another was arrested because the black smoke from his burning trays, albeit disguised in a brush pile, closed a highway. Even recently another told me he stuffs his household garbage can every week with used trays.





Although EPS tray disposal wasn't seen as an issue in the 1980's and early 1990's, by the mid to late 1990's GAP had established terms like 'sustainability' and 'renewability' of inputs to tobacco production dialogue, including transplant production. Growers started replacing their used trays.

Substitute short-term benefits with a sustainable profitable alternative







Good for the plants

Better for business

Best solution for our planet

REKA TRAY

In 2010 we introduced the 'REKA' tray, developed with our Malaysian partner and was used in Argentina, Indonesia and China.

REKA produced good plants, although, by year 2 the growers were tired of cleaning and chasing the 2 pieces





Trilogy Tray

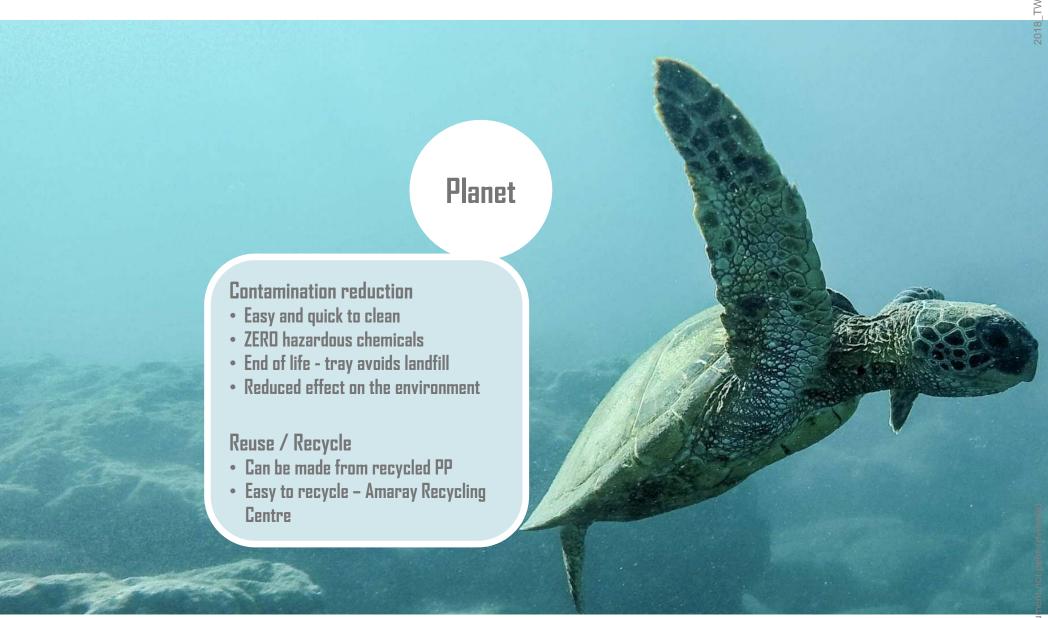
With our strong manufacturing partner Amaray in Elizabethtown, KY, we developed the first successful rigid, 1 piece sustainable, renewable float tray in 2014, called Trilogy.







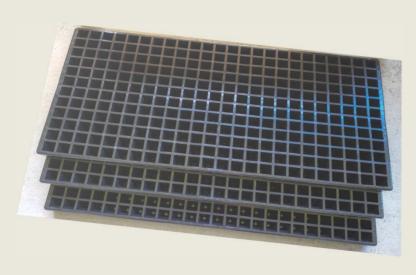




Investment • Product lifecycle = up to 20 seasons • Greater quantity of product per tray • Cost per use, significantly reduced · Higher return on investment Yield Best Better solution for for our business planet **Contamination reduction** Trilogy · Easy and quick to clean **Encourages** growth Tray • ZERO hazardous chemicals • Stimulates roots – stability & quality • End of life avoids landfill • ZERO contamination between root & tray · Reduced effect on the environment **Planet** Design · Reduced wastage Longevity Reuse / Recycle Good for • Polypropylene – hard to penetrate • Can be made from recycled PP the • Durable (transit/production/storage) • Easy to recycle - Amaray Recycling • Easy and quick to clean plants Centre Responsible

Trilogy Tray

Good for the plants Better for business Best solution for our planet







The Challenge to Change

Environmentally we didn't pay much attention to 'sustainability' and 'renewability' issues in agriculture back in 1986, change was initiated with GAP.

In this century the "Challenge of Change", is renewability and sustainability.

