

SUPERING TRIALS - KELMSCOTT  
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Midway through the 1968 planting on Peel Estate coastal sands, crew members of planting machines came up with an idea.

Why not put a man on the back of each machine with a tin of super, to fertilize each plant as it is planted?

It sounded a good and economical scheme, but one objection was that fertilizer may damage the plants so fresh from the nursery. Some experience was available to indicate that this may happen.

However, the trial was commenced.

A crude platform was welded to the rear of the planting machine, a seat added for the operator and two bins ( $\frac{1}{2}$  44 gallon drums) one on each side for convenient access for the operator, to maintain balance of weight of the machine and to provide sufficient carrying capacity.

An opening was made in the platform, square shaped in the middle with the base of the square at the operator's seat and the seat facing to the rear. When the planter is operating, the platform would be about six inches above the ground. The seat is set at a comfortable height to avoid operator's arms and knees interfering with one another (See figure 1).

As the newly planted seedling appears behind the planter in the square hole of the platform, the required amount of fertilizer is tossed near the plant. It is not tossed onto the foliage. It is preferable, to maintain balance of weight on the machine, to scoop from left and right bins alternatively, thus avoiding emptying one bin before the other.

An increase in tyre pressures on the planting wheels is necessary, depending on the condition of the soil.

Refilling the fertilizer bins coincides with loading plants and therefore does not delay the planting operation.

Man Power:

1 Tractor Driver, 2 Planters, 1 Fertilizer, 1 Supervisor.

Safety

1. The platform must be made in such a way as to prevent roots interfering with operator's feet and legs.
2. Eye protection and gloves, as provided for other operators on the machine.
3. Extend the existing cover to provide protection from weather.
4. An alarm system. A horn mounted in the cabin of the tractor with buttons for all operators and tractor driver to signal stops and starts.

Results

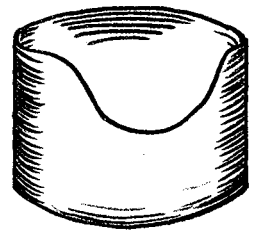
At November survival counts we found no evidence to indicate damage from early fertilizing.

Costs

Costs may be assessed in two ways.

1. By costing the one man only, per day to fertilizing and all plant costs to planting.  
OR
2. By reducing the planting costs in proportion and adding proportion of machinery and transport costs to the fertilizing. Comparing the above method of fertilizing with another method currently used, we saved 30% on fertilizer costs.

Figure 1 - Fertilizing platform for attachment to planting machine.



Bins cut away for access.

○

○ Plants

