

CULTIVATION OF PLANT CANE AT NATAL ESTATES, LIMITED

By H. L. GARLAND

As soon as a field has been planted harrowing is commenced.

The objects of this harrowing are as follows:—

1. Harrowing after planting makes sure that all the plant cane is properly covered. This is especially necessary during dry weather such as often prevails in early spring.
2. Harrowing makes a good tilth and so preserves moisture.
It is very important to harrow as soon as a crust begins to form on the surface of the soil when it is drying after rain. If a crust is allowed to form and cracks develop in it moisture is lost more rapidly than if the surface is stirred by the harrow.
3. Frequent harrowing kills weed seedlings whilst they are very small and so reduces the amount of hand weeding in the lines more than cultivation by any other implement.

Harrowing is done every five or six days from the time the cane is planted until it is about a foot high and from 2 to 3 months old from time of planting, except when the ground is too wet during and immediately after rains. As it is important to harrow as soon as possible after rains the quickest drying fields are chosen to start on after each heavy rain.

Two types of implements are used:—

A tractor harrow 30 feet wide and a light one horse harrow both manufactured locally by Eaton.

The one horse harrows do the work slightly cheaper than the tractor, but the latter is better because it can cover a larger area quickly, and the time factor is important. It is most economical in large fields. The tractor harrow can do 9 acres an hour whereas the light harrow with one horse or mule can do about 4 acres per day.

The costs have been worked out as follows:—

Cost of Harrowing with 30ft. "Caterpillar" Tractor doing 9 acres per hour.

Cost per hour.

	s.	d.
Fuel 3 gallons petrol @ 1/6	4	6
Lubrication	1	0
Labour, 1 driver and assistant	1	0
Depreciation—25%	1	0
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	7	6

Cost per acre 10d.

Cost of Harrowing with one mule or horse doing 4 acres per day.

Cost per day.

	s.	d.
1 driver @ 2/-	2	0
1 mule @ 8d.		8
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	2	8

Cost per acre 8d.

When the cane is too high to be harrowed the cultivators are put in. The number of cultivations required naturally varies, but usually about four times is all that is necessary before the cane closes in.

In certain types of soil one or two pony ploughings may be found necessary to loosen the surface of the soil to a certain depth and so improve the tilth after the cultivator has followed the plough.

Pony ploughing is usually only done once as it is considered that frequent pony ploughing especially in dry spells is apt to go too deep and cut some of the young feeder roots of the cane.

If harrowing and cultivating are kept up continuously only one hand weeding is necessary and usually it is easy to get through.

The average cost per acre of cultivating cane by this method from the time it is planted till it has closed in is as follows:—

	s.	d.
Harrowing 12 times @ 9d.	9	0
Cultivating 4 times @ 1/6	6	0
Hand weeding @ 10/- per acre	10	0
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Total per acre £1 5 0