

A NOTE ON DIE-BACK IN RELATION TO PRE-PRUNING PRACTICE

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The experiment described below was laid down by one of us (A.D.S.). The objective was to determine whether the die-back of branches after pruning could be reduced by pre-pruning treatments.

The pre-pruning treatments were:

- 1 - Normal hard plucking prior to pruning
- 2 - Resting, *ie*, no plucking at all
- 3 - Leaving a full leaf above the big fish leaf on the bush before pruning.

The design was a single 3 × 3 Latin-Square in which each treatment appeared once in each row and once in each column. The lie of land in the experimental block is almost level at an elevation of 3200 ft. The field is on a 4-year pruning cycle and having been twice 'Up and Down' pruned (Scott 1963), there was a mass of excellent new wood, and very little saw work to be done. There was considerable shot-hole borer infestation and Dieldrex spraying was carried out after pruning, but had not been carried out at the earlier prunes. Three or four vigorous lung branches were left on each bush. These were removed prior to tipping as and when the new growth roughly balanced the foliage available on the lungs. Each plot contained 400 bushes.

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|----------------------|-------------|----------------------|
| Date of commencement | .. 18-11-64 | } 6 plucking rounds. |
| Date of pruning | .. 13- 1-65 | |
| Date of tipping | .. 20- 5-65 | |

After tipping, a count was made of the number of branches which had died back.

It is now known that the design, though perfectly valid in itself, is inadequate for the purpose of drawing firm conclusions. This is so for technical reasons. The conclusions from the results must, therefore, be considered tentative. Nevertheless, the Director TRI, desired that these conclusions should be made available to planters.

| | Treatments | Significant difference (P = 0.05) |
|---|-----------------------------|--------------------------------------|
| Mean No of Branches which had died back | Normal and Rested Full Leaf | |
| | 955 | 758 |
| | 1045 | 865 |
| | 1045 | 865 |

It appears that, if a full leaf above the fish leaf is left on the bush prior to pruning, it significantly reduced the die-back of branches as compared with normal plucking or resting. However, there seems to be no significant difference in the number of branches which died back if the bushes were previously rested or normal-plucked.

Reference

Scott, A. D. (1963). Up and down pruning: mid- and up-country observations. *Tea Quart.* 34: 198-200.

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