

The Effect of Pruning, Weeding and Fertilization on the Yield of Arabica Coffee in South Western Ethiopia

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SUMMARY

In Goma woreda, where Agaro is in the centre, the application of recommended level of N and P (N150 P33) is needed for high yielding trees. Once couch grass is brought under control through hoeing and frequent slashing, regular slashing will keep the weeds down in coffee plantation. Among the pruning practices the single stem capped is not recommendable for Goma area. Clean stumping and raising to 2 or 3 stems per tree or raising suckers of 1 to 6 year old on a tree and stumping the oldest 6 year old stem or the oldest 4 year old sucker are acceptable under Agaro condition.

This experiment also confirmed the need of low fertilizer for Gera as has been suggested in the past (Paulos, 1994). The *Cyperus* spp and *D. abyssinica*, the dominant weeds in area should be controlled by integrating cultivation and frequent slashing. Except the single stem the other pruning treatments tested gave similar results.

From this experiment the response to fertilizer application at Bebekka was low. However, this could be from the low yielding variety. For high yielding trees maintenance dose is suggested. The weeding exercise has not been a critical factor in this trial. Among the pruning treatments the 2 and 3 stem verticals were the high yielding ones at Bebekka and the 1-2-3-4 year old was probably the lowest yielding one.