



## SUPERPHOSPHATE PROVES VALUABLE IN HELPING TO CARRY EWES THROUGH A DRY SEASON

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### INTRODUCTION

A crossbred ewe grazing demonstration was conducted at Sutton, near Queanbeyan, over 26 months, concluding in November 1988. The demonstration was a joint project between AFL and NSW Agriculture & Fisheries.

Ewes were run on two 27 ha paddocks. One of these paddocks received 250 kg/ha Mo superphosphate (super) at the commencement of the trial, then 125 kg/ha single super 1 year later. The other paddock received no super.

Both paddocks consisted of shale/granite soils carrying a phalaris/sub clover pasture infested with *Vulpia*. No super had been applied to either paddock in the 10 years prior to commencement of the trial.

Seventeen of the 26 months during which the trial was conducted received below average rainfall.

### RESULTS

Pasture growth and composition were measured at 6 week intervals, together with lamb production, lamb finishing times, wool production and stocking rate.

Overall pasture yield was roughly equal for the two paddocks over the length of the trial, though the unfertilised paddock actually produced more feed in the summer period, due to some low lying areas in the paddock that survived better during the summer.

Despite this, the fertilised paddock carried an extra 1.3 ewes per hectare, and turned off 15% more lambs. Lamb growth rates were also superior on the fertilised paddock - 60% of lambs were turned off at 5 months of age and at a minimum weight of 32 kg, against only 20% from the unfertilised paddock.

The reason for the improved animal performance in the fertilised paddock lay in the superior feed quality. The fertilised paddock grew 25% more clover which led to an increased feed protein level.

On a per hectare basis, the fertilised paddock also produced 14% more clean wool per ha than the unfertilised paddock. The wool was 0.9 microns finer from the fertilised paddock and showed no break, whereas wool from the unfertilised paddock showed a break near the tip.

After deducting the cost of the super and supplementary feed, the total extra profit attained on the fertilised paddock was \$1235 for the 26 months, or \$21.11/ha/annum.

## CONCLUSION

This demonstration clearly re-inforced the principle that fertilised pastures maintain higher production than unfertilised pastures, even in dry seasons.

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