How much feed is in the paddock?

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In 1985, dairy farmers in the Central Adelaide Hills, and the authors attempted to quantify the potential for increased pasture production by measuring the range of herbage production from pastures within the district. In addition, monthly pasture growth rates were to be determined.

Methods

Four dryland pastures were monitored from 1985 to 1987, eight irrigated pastures were monitored in 1985/86 and three commercial pasture mixtures (wintermix) were monitored in 1986. Monthly dry matter (DM) production was measured using four open and closed quadrats of 0.25 x 0.40 m per paddock.

Results and discussion

The dryland pastures consisted of subterranean clovers, *Trifolium subterraneum*, perennial ryegrass, *Latium perenne*, phalaris, *Phalaris aquatica*, and cocksfoot, *Dactylis glomerata*. Annual production ranged from 7.8 to 14.1 tDM/ha in a good year (1986) and from 6.4 to 8.6 tDM/ha in a poor year (1987). Mean annual production was 9.5 tDM/ha.

The irrigated pastures consisted predominantly of white clover, and perennial ryegrass, and annual production ranged from 14.2 to 27.5 tDM/ha. Mean annual production was 18.8 tDM/ha.

The wintermix pastures consisted of a blend of either Italian ryegrass, *Lolium multiflorum*, hybrid ryegrass *Lolium x boucheanum*, Persian clover, *Trifolium resupinatum*, balansa clover, *Trifolium michelianum* var. *balansae*, and a cereal, either oats, *Avena saliva* or barley, *Hordeum vulgare*. Annual production ranged from 13.0 to 15.1 tDM/ha. Mean annual production was 14.1 tDM/ha.

Monthly growth rates (kg DM/ha/day) (Fig. I) focused the farmers' attention on the deficits in June/July/August for dryland pastures and April/May for irrigated pastures. Having identified these pasture shortfalls they were encouraged to feed their cows closer to their daily requirements. This information quantifies the production of dairy pastures in the Central Adelaide Hills and provides a yardstick for farmers wishing to increase pasture production.

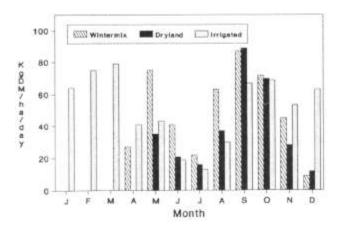


Figure 1. Mean pasture growth rates in 1986

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