Artificial long days increase milk yield in local goats from subtropical Mexico milked twice daily

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OBJECTIVE

The study was carried out to determine if in local goats from subtropical Mexico milked twice daily and exposed to an artificial long-days photoperiod may increase milk yield.

MATERIALS AND METHODS

One group of female goats milked twice daily was kept under a natural decreasing photoperiod (SD2X; n=8), whereas the other group was submitted to an artificial long-days photoperiod (LD2X; n=7: 16 h light: 8 h darkness; Figure 1).

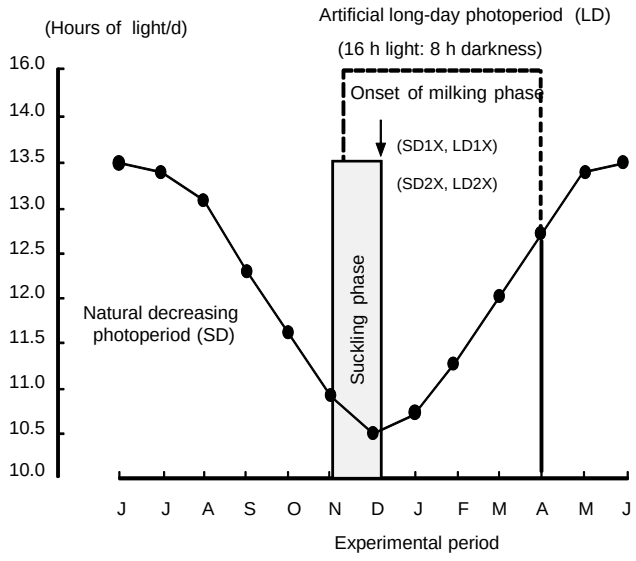

Figure 1. Experimental design showing goats groups manually milked twice daily (2X) and maintained under naturally decreasing days (SD;n=8) or under an artificial long-days photoperiod (LD;n=7).

RESULTS

Mean daily milk yield during early milking phase was greater ($P < 0.05$) in LD2X (3.3 ± 0.2 kg) than in SD2X does (2.8 ± 0.2kg).

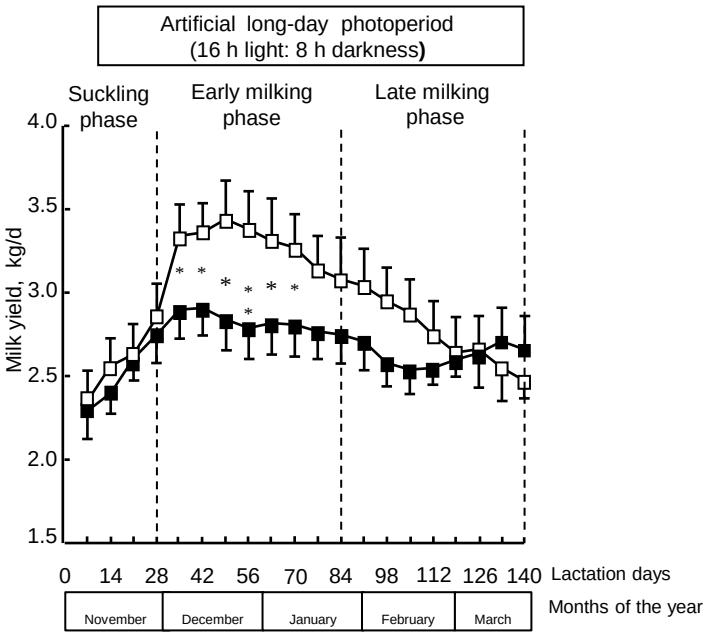

Figure 2. Mean (± SEM) daily milk yield of goats manually milked twice daily and exposed to natural decreasing photoperiod (■; SD2X group) or exposed starting on d 10 of lactation to an artificial long-day photoperiod (□; LD2X group) up to the first 140 d of lactation.

CONCLUSION

We concluded that in subtropical goats kidding during natural short days and milked twice daily exposure to an artificial long-days photoperiod increase milk yield during early lactation.

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