

## **The Effect of Evaporative Cooling in Alleviating Seasonal Differences in Milk Production of Almarai Dairy Farms in the Kingdom of Saudi Arabia.**

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The effect of evaporative cooling in alleviating seasonal variations of dairy cows raised in AlMarai Dairy Farms in the Kingdom of Saudi Arabia were studied using milking record collected during the period of 1991 to 1996. The data included 13303 and 8137 records represented winter and summer calving seasons. Evaporative cooling system improved production for cows calved in summer. The least square means of milk yield were 9631 and 9556 liter for cows calved in winter and summer seasons but no significant differences ( $p < 0.05$ ) were observed between the yield of two seasons. No significant effect of season on calving under evaporative cooling on most of the biweekly points of the lactation curve like initial yield, 305 MY, peak yield, time of peak and duration were estimated for each phase of the lactation curve.

**Key Words :** Evaporative Cooling, Lactation Curve, Seasonal Variations