

# AbstrAct

This study was conducted on records of Frisian –Holstein breed in farm of Azaheer Agricultural and Animal production of investment CO.LTD (Arabic Company previously) in Elbagir Area in northern region of the gezira.

The objective of this study was to investigate the effect of daily milk productivity on reproductive and productive traits.

(Five) Cows were selected from total of (503) cows depended on full in data records.

Data of some reproductive and productive traits were collected:-

- Daily milk production
- Lactation length
- Number of service per conception
- Open period
- Calving interval
- Dry period length

Daily production of milk was calculated by non-Traditional manner according to this rule:-

$$\text{Effect of daily production} = \frac{\text{milk productivity during the season}}{\text{Calving interval length}}$$

Daily production were calculated by this way to determine the extent of its in flounce and role of residual effect of lactation hormones on the reproductive performance for the next stage.

It was built this study and was comparable by international standers rates as to source of control group. Illustrated that in table (17) and the results demonstrated that:-

- 1- Significant difference ( $p < 0.05$ ) were found between control and treated group on all parameters studied.

- 2- There is negative effect from the daily milk production on all reproductive and productive traits that means there is residual effect of hormonal Activity during that period.
- 3- The mean of lactation length was 277.7 days with minimum of 251days and maximum 333.3 days.
- 4- Mean number of service per conception was 2.0.
- 5- Mean of open period was 114 days.
- 6- Mean length of calving interval was 382days with maximum of 430 days and minimum 340 days.
- 7- The mean of dry period was100 days.