



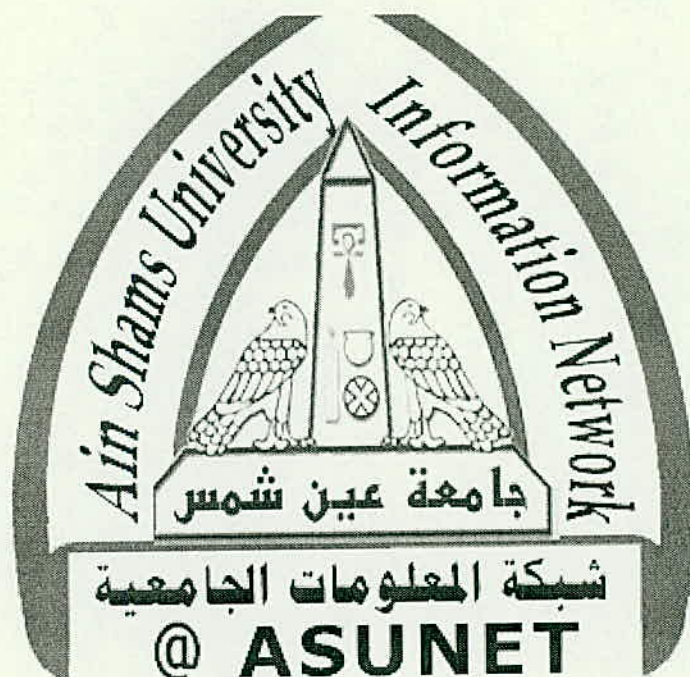
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شبكة المعلومات الجامعية

التوثيق الالكتروني والميكرو فيلم



شبكة المعلومات الجامعية

جامعة عين شمس

التوثيق الالكتروني والميكرو فيلم

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نقسم بالله العظيم أن المادة التي تم توثيقها وتسجيلها
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بالرسالة صفحات

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بعض الوثائق الأصلية تالفة

THE PERFORMANCE OF HOLSTEIN COWS UNDER EL-FAYOUM CONDITIONS

By

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THESIS

Submitted in Partial Fulfillment of the Requirements for

The Degree of Master of Science

in

Agricultural Sciences

(Animal Production – Physiology)

Department of Animal Production

Faculty of Agriculture,

El-Fayoum

Cairo University

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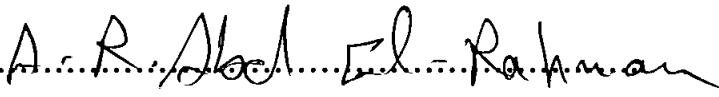
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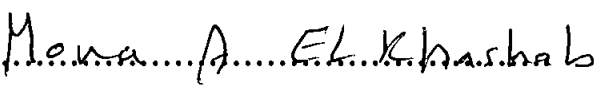
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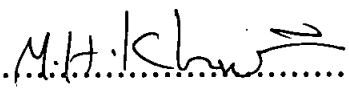
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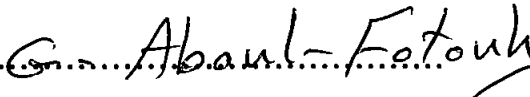
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ABSTRACT

The present study was carried out using eight Holstein cows (1st and 2nd parity). Milk samples were taken fortnightly from evening and morning milking of each cow, and analyzed for butter fat, protein, lactose, solids not-fat, total solids, ash, calcium, and phosphorus. The effects of the parity, stage of lactation and milking time on the milk yield and the composition of milk have been investigated. The relationship between partial milk yield and total milk yield was calculated. Serum blood samples were also taken from the cows fortnightly after evening and morning milking and analyzed for total protein, albumin, globulin, glucose, cholesterol, triglycerides, calcium and phosphorus. The effects of parity, stage of lactation and milking time on serum constituents have been investigated. The data of milk yield showed that there were significant effects of parity and lactation weeks. Also there was significant effect of parity and lactation weeks on milk composition. Moreover significant effect of time of milking on milk yield and its composition was observed. There was significant effect of parity on blood serum, total protein, globulin, albumin/globulin, cholesterol, calcium and triglycerides while insignificant effect was found for albumin, glucose, phosphorus and calcium / phosphorus. Serum total protein and calcium were affected significantly by lactation weeks while albumin, globulin, cholesterol, triglycerides, glucose, and phosphorus were insignificantly affected. There was significant effect of milking time on total protein, albumin, globulin, cholesterol, triglycerides, glucose, and calcium, however, albumin/globulin ratio and phosphorus were insignificantly affected. Highly positive correlations were found between each of udder measurements and total milk yield of both 1st and 2nd parity. Parity had a highly significant effect on all of the examined udder measurements, which increased from the first to the second parity. Lactation weeks had a highly significant effect on all of the udder measurements. Phenotypic correlation coefficient among different udder measurements were positive and highly significant in both 1st and 2nd parity. All correlation coefficient between body measurements and total milk yield were positive. Parity had a highly significant effect on all body measurements, which increased from the first to the second parity. Lactation weeks had insignificant effect on all of body measurements. Correlation values between different values body measurements were positive and significant.

Key words: (Holstein, milk, yield, milk composition, blood serum constituents, body weight, udder and body measurements, parity, weeks of lactation).

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