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"Dissertation Abstract

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Title: PHYSIOLOGICAL STUDIES OF RABBITS		
Dissertation Abstract		

The present study was carried out in the Rabbit Production Farm, Agricultural Researches and Experiments Station, Faculty of Agriculture, Mansoura University, Mansoura , Egypt, during the period from July to December 2005. The main objective was to reduce deleterious effects of heat stress on rabbits productive and reproductive performance during summer and autumn by injection different doses of vitamin AD_3E . Rabbits which were used in the present study were fifty NZW does and fifteen bucks. Both does and bucks were divided into five groups (10 does and 3 bucks in each group).

The first group was control that injected with 1.00 ml from saline solution (0.9 ml Na Cl), the second, third , fourth and fifth groups were biweekly injected with doses 0.5, 1.00, 1.50 and 2.00 ml /doe from vitamins AD $_3$ E, respectively. Data were collected for tow seasons and included number of services per conception, days open, gestation period length and kindling interval. The productive traits include litter size, litter weight, mortality rate, mean bunny weight, daily weight gain at birth, 21 days and at weaning. Semen characteristics for experimental bucks were also examined . Ejaculate volume, mass motility (score), progressive motility%, sperm cell concentration, dead spermatozoa%, abnormal spermatozoa%, sperm output, motile sperm / ejaculate and live sperm /ejaculate were determine.

In conclusion, injection different levels from vitamin AD_3E at levels of 0.5, 1.0, 1.5 and 2.0 ml/animal biweekly to rabbits (does and bucks) improved conception rate (decrease number of services per conception) and improved both mean bunny weight and daily weight gain as well as viability of produced bunnies during autumn and summer. Also, injection of vitamin AD_3E improved productive and reproductive performance and semen quality. The level of 1.00 ml/animal showed the best results for does and bucks. Therefore, heat- stressed buck rabbits injected with 1.00 ml from vitamin AD_3E could be used to improve reproductive efficiency as a therapy for temporary summer sterility which commonly occurs for some bucks and does during exposure to hot climatic conditions.

Keywords: Rabbit, vitamin AD₃E, semen, reproduction and production...



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التاريخ: ٢٠٠٨/٢١٢٥	اللرصفة الفطلتيات الكقوالاناة جية	القه المطالله وضاوا عالت تدكر لفهم فيتالم والمدسلة في المنوي
	بنار	عنوان الرسالة: دراسات فسيولوجية على الأر
ملخص الرسالة		

أجريت هذه الدراسة في مزرعة الأرانب – قسم إنتاج الدواجن – كلية الزراعة – جامعة المنصورة- محافظة الدقهلية وذلك خلال الفترة من يوليو حتى نهاية ديسمبر (٢٠٠٥) على عدد ٥٠ أنثى وعدد ١٥ ذكر من سلالة أرانب النيوزيلندى الأبيض وكان الهدف من الدراسة معرفة تأثير كل من موسم الإنتاج وحقن فيتامين ادءهـ

بمستويات (٥٠،١،١،٥،١، ٢ملل/حيوان) كل خمسة عشر يوم للذكور والإناث أثناء مدة التجربة على :

١ - صفات الأمهات:

- أ- **صفات تناسلية**: تشتمل على (عدد التلقيحات اللازمة لحدوث الإخصاب مدة الحمل الفترة المفتوحة (الفترة من الولادة حتى أول تلقيح مخصب) الفترة بين ولادتين).
- ب- صفات إنتاجية: تشتمل على (حجم البطن- وزن البطن- النسبة المئوية للنفوق- متوسط الوزن الفردي معدل الزيادة اليومية في وزن الجسم) وذلك عند أعمار الميلاد-٢١ يوم- ٣٥ يوم (الفطام) هذا بالإضافة إلى معدل الاستهلاك اليومي من الغذاء.
- **Y صفات الذكور:** (صفات السائل المنوي): وتشتمل على (حجم القذفة الحركة الجماعية الحركة التقدمية النسبة المئوية للمبيت النسبة المئوية للمشوه- تركيز الحيوانات المنوية- العدد الكلى للحيوانات المنوية لكل ملل عدد الحيوانات المنوية المتحركة لكل قذفة عدد الحيوانات المنوية الحية لكل قذفة).

أوضحت النتائج إن حقن فيتامين اد $_7$ هـ بمستويات ($_7$ 0، ، ، ، ، ، ، و الخوان ملل/حيوان الذكور وإناث الأرانب كل خمسة عشر يوم أدى إلى تحسن واضح في نسبة الخصوبة (انخفاض عدد التقيحات اللازمة للإخصاب) و كذلك تحسن متوسط الوزن الفردي للنتاج ومعدل الزيادة اليومية بالإضافة إلى تحسن الحيوية (انخفاض نسبة النفوق) خلال فترة التجربة (الصيف، الخريف) ، علاوة على ذلك لوحظ تحسن في صفات السائل المنوي. وتحققت أفضل النتائج عند الحقن بمستوى الملل فيتامين اد $_8$ هـ حيوان $_7$ 0 يوم.

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