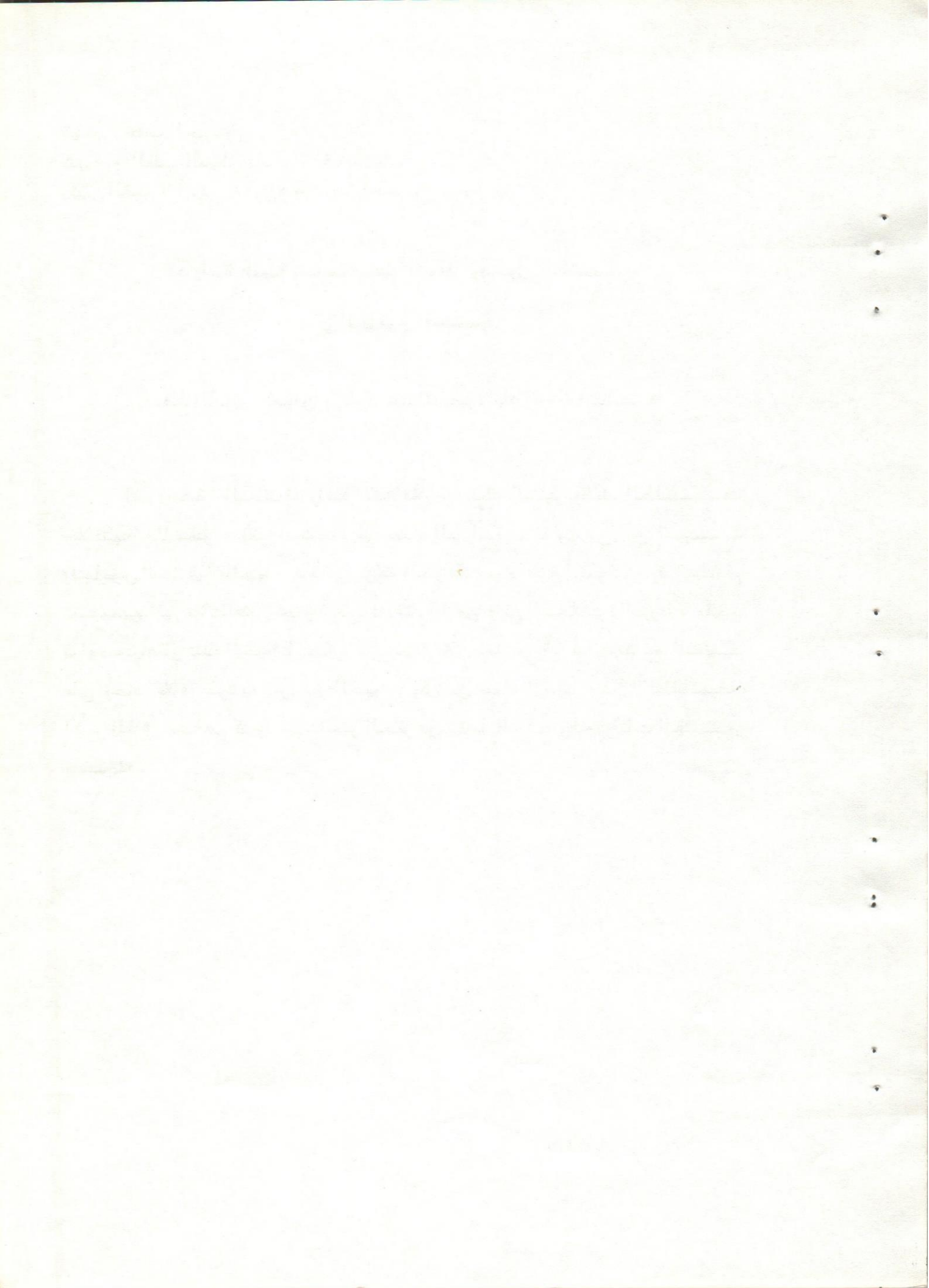


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## دراسة طبية شرعية لسماك الجلد وطول الظلـف في الجاموس المصرى

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اجرى هذا البحث لدراسة العلاقة بين سمك الجلد وطول الظلـف وعلاقتها بالعمر ، وقد استخدم في هذه الدراسة مائة وثلاثون من انثى الجاموس المصرى والمتواجدة في مزرعة الحواتكه بمحافظة أسيوط . وقد تم تقسيمهم الى ثلاثة عشر مجموعة حسب أعمارها من واقع السجلات بالمزرعة ، وقد تراوحت أعمار تلك الحيوانات بين يوم وستة عشر عاما ، وقد دلت نتائج البحث على وجود علاقة طردية بين عمر الحيوان وكل من سمك الجلد وطول الظلـف، الأمر الذى يساهم كثيرا في تقدير العمر في بقايا الجثة والحيوانات الغير مسجلة .



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**A MEDICO-LEGAL STUDY OF SKIN THICKNESS  
AND CLAWS LENGTH OF EGYPTIAN BUFFALOES**  
(With One Table)

By  
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**SUMMARY**

The present work was Carried out on 130 female Egyptian buffaloes at El-Hawateka farm, Assiut province. The animals were devided into 13 groups, according to their age which ranged from one day to 16 years according to farm regestrations. The present work indicated that there is a propertional relationship between both skin thickness, claws length and the age of examined animals.

**INTRODUCTION**

Evidence of the age of any animal, alive or dead, if not already proved by the birth certificate, is usually demanded from the medice-legal expert, TAHANI (1980) stated that dentation ossification centers of different bones and conjugation of bene epiphysis are the main factors used for age determination in reminants of carcasses. In addition to previous factors, the present study about the importance of skin thickness and claws length could serve as an aiding factor for determination of age in the reminants of Egyptian water buffaloes carcasses.

**MATERIAL and METHODS**

The animals used in this study were femals Egyptian water buffaloes of El-Hawateka farm at Assiut province, Egypt. One hundered and thirty animals from different ages (recorded from farm regestrations) were examined for skin thickness & Claws length. Skin thickness have been estimated by skin fold technique (PATEL and ANDERSON, 1953), TULLOW (1961) which include subcutaneous fat and muscle.

**RESULTS**

Results obtained were recorded in table (1).

Table (1) : Skin thickness and claws length in Egyptian water buffaloes

Age	Skin thickness/centimetre			Claws's length/centimetre.		
	Minimum	Maximum	Mean $\pm$ S.E.	Minimum	Maximum	Mean $\pm$ S.E.
1-3 Days	0.24	0.35	0.303 $\pm$ 0.045	4.0	5.0	4.80 $\pm$ 0.40
1-2 Mounths	0.27	0.41	0.322 $\pm$ 0.035	4.0	6.0	5.06 $\pm$ 0.733
2-4 Mounths	0.32	0.43	0.365 $\pm$ 0.048	5.2	7.0	6.36 $\pm$ 0.799
5-7 Mounths	0.36	0.45	0.384 $\pm$ 0.030	6.2	7.5	6.745 $\pm$ 0.420
8 Mounths-1 years	0.36	0.42	0.395 $\pm$ 0.028	6.5	8.0	7.60 $\pm$ 0.648
2-3 years	0.44	0.63	0.541 $\pm$ 0.068	9.0	11.0	10.00 $\pm$ 0.866
3½-4 years	0.50	0.71	0.615 $\pm$ 0.069	9.5	12.0	11.066 $\pm$ 1.000
4½-5 years	0.54	0.71	0.615 $\pm$ 0.065	10.0	12.0	11.111 $\pm$ 0.780
6 -8 years	0.53	0.71	0.632 $\pm$ 0.051	10.0	13.0	11.307 $\pm$ 0.854
8½-10 years	0.61	0.73	0.660 $\pm$ 0.043	10.0	14.0	11.666 $\pm$ 1.505
10½-12 years	0.61	0.82	0.685 $\pm$ 0.067	10.0	14.0	11.625 $\pm$ 1.302
12½-14 years	0.61	0.76	0.704 $\pm$ 0.049	11.0	13.0	12.050 $\pm$ 0.724
14½-16 years	0.65	0.80	0.724 $\pm$ 0.085	11.0	14.0	12.537 $\pm$ 1.260

S.E. : Standard Error.

## SKIN THICKNESS AND CLAWS LENGTH

**DISCUSSION**

From the previous results it is obvious that there is a definite relationship between the skin thickness and claws length in regards to age of the examined animals. DOWLING (1955 b); WALKER (1957), and PAN (1962) measured the skin thickness in various breeds of cattle, but there is no available literature concerning skin thickness and claws length of buffaloes.

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