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خمول المبيض في الأبقار والجاموس المصري

أ- الاختلافات الموسمية

محمود النجار ، ممدوح عثمان ، أحمد فراج ، شحاته حسن

١- أجرى هذا البحث في المزارع الحكومية التابعة لمحافظة أسيوط (مزرعة الأبقار - بعرب العوامر ، ومزرعة الجاموس - بالحواتكه) .

٢- تم في هذا البحث فحص ١٦٩ بقرة ، ٣٠٤ جاموسه مرتين خلال كل فصل من فصول السنة وقد أوضحت الدراسة أن نسبة خمول المبيض في الأبقار كانت ٢٩.٠٩% ، ١٧.١٦% ، ٩.٩٤% ، ١٢% خلال فصل الخريف الشتاء ، الربيع ، والصيف مع الترتيب ، وكانت النسبة المقابلة في الجاموس في نفس الفصول كالتالى ٣٢.٣٨% ، ١٦.١٢% ، ١٢.١١% ، ٢١.٠٧% .



Dept. of Obstetries Gynaecology & A.I.
Faculty of Vet. Med., Assiut University,
Head of Dept. Prof. Dr. M.A. Wl-Naggar

OVARIAN INACTIVITY AMONG EGYPTIAN COWS AND BUFFALOES
A- Seasonal variations
(With One Table)

By
M.A. EL-NAGGAR; A.M. OSMAN; A.A. FARRAG and S.H.M. SHEHATA
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SUMMARY

A total of 164 Native cows and 304 buffaloes were examined from Gynaecological point of view throughout the year. The results showed that, the incidence of ovarian inactivity in cattle was 29.09 %, 17.16 %, 9.94 % and 12 % during Autumn, winter, spring and summer respectively. The overall incidence of inactive ovaries was 17.2%. The corresponding values obtained for buffaloes were 32.38%, 16.12 %, 12.11 % and 21.07 %. The overall incidence of inactive ovaries in buffaloes was 19.42 %.

INTRODUCTION

Infertility problems among cows and buffaloes are directly related to the nutritional needs of the human population as well as to the economic status of the country. WHABY (1964) estimated the economic losses due to infertility problems in Egyptian cows and buffaloes to be about 44 million pounds per year. However, there is few literature showing the incidence of infertility in cows and buffaloes which might be cause of reproductive failure.

In cattle, the incidence of anoestrus was 29.6 % (ZAKI, EL-WISHY, OSMAN and AFIFY, 1963). AFIFY, ABUL-FADEL and ZAKI (1971) found that the inactive ovaries reached 85.75 % in winter and 65.65 % in summer. EL-TAIB (1976) reported that the incidence of ovarian subfunction was 23.5 %.

The incidence of anoestrus due to ovarian inactivity in buffaloes as reported by SHOKIER (1958); EL-SAWAF and SCHMID (1962); Schmidt EL-SAWAF and GHARIB, (1963) and EL-WISHY, (1965) were 2.6 %, 10.3 %, 38.7 % and 36.55 % respectively. In Assiut province, FARRAG (1978) found that the incidence of ovarian inactivity in buffaloes was 21.31 %.

The aim of this work was to study the seasonal variation in the incidence of ovarian inactivity among Native cows and buffaloes reared in Governemental farms of Assiut province.

MATERIAL and METHODS

A total of 169 Native cows and 304 buffaloes were included in this study. These animals were raised at ARAB EL-AWAMER and EL-HAWATKA governemental dairy farms. Animals were Gynaecologically examined two times with 10 day interval during each season of the year. Animals with completely static ovaries at the two rectal palpations were considered to be affected with ovarian inactivity.

M.A. EL-NAGGAR, *et al.***RESULTS**

In both cows and buffaloes the obtained results showed seasonal variations in the incidence of ovarian inactivity table (1).

DISCUSSION

In cattle, our results showed that the highest incidence of inactive ovaries was present during autumn (29.09 %) followed by winter (17.16 %) and summer (12.12 %) while it was lowest during spring (9.9 %). The incidence of inactive ovaries among non - pregnant cows was 55.8 %, 37.6 %, 32.1 % and 25.5 % during winter, summer and spring respectively. In this respect, AFIEFY, *et al.*, (1971) found that ovarian activity decreased from 85.7 % in winter to 66.6 % in summer.

The total incidence of inactive ovaries (17.2 %) allover the year. Nearly similar results were reported by ZAKI *et al.* (1963), KING *et al.*, (1976) and KRUIF (1977).

In lower Egypt, BARR (1963), EL-TALÉB (1976) and EL-SAWAF and SHALABY (1977) reported that the incidence of inactive ovaries among infertile cows was ranged between 25.4 % and 53.84 %. In Assiut province, SERUR *et al.*, (1981) reported that the incidence of inactive ovaries was 74.73 % in private cases. The difference may be attributed to the different Kinds of mangement and feeding in the governemental forms than in private cases. EL-WISHY (1976) reported that the incidence of inactive ovaries was higher in private cases than in governemental farms in Uganda.

In buffaloes, the obtained values for the incidence of inactive ovaries during the different seasons of the year coincides with those reported by MIKHAIL (1979) in Upper Egypt. ZAKI *et al.*, (1963) suggested that the favourable time for maximal conception in buffaloes occurred during winter. The unfavourable climatological conditions especially the high temperature may be the cause of high incidence of ovarian inactivity during summer. Moreover, GWAZDAUSKAE (1975) reported that high temprature and relative humidity were accompanied by hormonal changes in blood of Holstein heifers.

The values obtained for the incidence of inactive ovaries in buffaloes were higher than those reproted by EL-SAWAF and SCHMIDT (1962) in slaughtered non-pregnant buffloes. The differences may be attributed to nutritional or enviromental factors.

The overall average percentage of buffaloes suffered from inactive ovaries was 19.4 % which was lower than 29 % and 36.55 % reported by BARR, (1963) and EL-WISHY (1965) repectively. On the other hand the incidence of inactive ovaries in non-pregnant buffaloes was 45 %. This value was lower than 81.22 % reported by SERUR *et al.*, (1981) for the incidence of inactive ovaries in private cases. The difference may be attributed to the well feeding and well mangement of animals raised in governemental farms. MIKHAIL (1979) found that the incidence of inactive ovaries was higher in buffaloes of bad nutritional condition than those in good condition.

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Table (1): Seasonal variations in the incidence of inactive ovaries in cows and buffaloes

Season	Fertile cow	Infertile cows		Total	Fertile buffaloes	Infertile buffaloes		Total			
		Inactive ovaries	Cystic ovaries			Inactive ovaries	Cystic ovaries				
Winter	No	135	29	2	3	169	135	49	2	11	304
	%	79.90	17.16	1.18	1.78	100	79.61	16.12	0.66	3.62	100
Spring	No	140	16	2	3	161	249	35	1	4	289
	%	86.96	9.94	1.24	1.86	100	86.16	12.11	0.35	1.38	100
Summer	No	129	18	1	2	150	189	51	-	2	242
	%	86.00	12.00	0.67	1.33	100	87.10	21.07	-	0.83	100
Autumn	No	110	48	1	6	165	138	68	1	3	210
	%	66.66	29.09	0.66	3.64	100	65.71	32.38	0.48	1.83	100
Total	No	514	111	6	14	645	818	203	20	20	1045
	%	80.25	17.20	0.93	2.17	100	78.26	19.42	1.91	1.91	100