

**COMPARATIVE STUDY OF THE RELATIONSHIP  
BETWEEN THE QUANTITIES OF ACTIVE 3- $\beta$ -HSDH  
AND 17- $\beta$ -HSDH CELLS IN THE OVARIES  
OF MUSCOVY AND PEKING DUCKS**

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In *Muscovy* and *Peking* domestic female ducks, the cells showing a  $\Delta^5$ -3- $\beta$ -hydroxysteroid dehydrogenase activity were localized at the theca interna level of the follicles, whereas the cells with an active 17- $\beta$ -hydroxysteroid dehydrogenase enzyme were spread under the germinative epithelium. The relationship established between these two cellular categories was quite different and characteristic for each species of female ducks.

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**HISTOLOGICAL AND CYTOLOGICAL STUDY  
OF THE TESTIS AND GENITAL TRACTS  
OF MUSCOVY DUCKS (*CAIRINA MOSCHATA* L.)  
DURING SEXUAL ACTIVITY**

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1. The cellular associations of the seminal epithelium were studied on semi-fine sections coloured with toluidine blue. The observations are in quite good agreement with what Y. CLERMONT (1958) found in the Peking duck (*Anas platyrhynchos* L.).

In the interstitial spaces, the Leydig cells, with large nucleolli and with cytoplasm filled with lipids, formed large islets.

2. The genital tracts were observed on 5  $\mu$  paraffin sections.

Four types of ducts can be seen in the epididymis :

- a) rete testis ducts ;
- b) efferent ducts ;
- c) connecting ducts ;
- d) epididymis ducts.

The deferent duct was very sinuous and full of spermatozoa stored in a seminal vesicle and expelled during copulation into a proctodaeal gutter which channeled them towards the helicoidal groove of the penis.

3. The penis is composed of an internal erect tube on which another external devagination tube is fixed.

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## II. — Genetics and behaviour

### **STABILIZING SELECTION AND GENETIC HOMEOSTASIS IN *COTURNIX COTURNIX JAPONICA***

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The relationship between egg weight and hatchability was established in several Japanese Quail populations. Maximum hatchability above the mean of egg weight arrays, and remained at this level in spite of egg weight variations. Inbreeding caused decreasing hatchability of extreme egg weight classes.

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### **FIVE YEARS OF STUDY ON THE REPRODUCTION OF GEESE ACCORDING TO VARIOUS FACTORS OF REARING**

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### **AMBIANT HEATING AND ITS SUBSEQUENT EFFECTS ON THE VIABILITY OF BROILERS REARED IN CAGES**

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From January 1971 to December 1972, we studied 8 flocks of broilers caged from the age of one day and till 50 days. Different strains were used. The cages were located in a windowless house where the main purpose was to compare the different strains of broilers. Filtered air and positive