

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.

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.

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

pressure were provided. The heating by air circulation kept the temperature uniform through out the building. A design of the cages used is supplied. The findings and data, especially the mortality rate from day 1 to day 10 of rearing, are indicated.

The results are not obtained from specific environmental trials where control conditions could be tested, but are based on attempts made to determine the best environmental conditions and the lowest mortality. With regard to this fact, the data indicated must not be considered as standard values.

FEEDING BEHAVIOUR OF DOMESTIC CHICKS DURING THREE WEEKS AFTER HATCHING

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A device for automatic graph recording of the liquid and solid food intake in *ad libitum* fed domestic chicks is described. This apparatus was used to measure the food intake of four chicks during 21 days after hatching. The chicks were reared in individual cages under two light regimes: continuous light (LL) and 14 hours light, 10 hours dark (LD). There was a significant difference in body weight at the end of the control period, LL chicks being heavier than LD. The subjects consumed on an average 60 to 90 meals per day regularly distributed over the light period, and the consumption and rate of feeding (g/mn) increased with age. The average length of time spent eating per meal was constant: 2 mn 20 s \pm 19 s for LL chicks and 2 mn 50 s \pm 24 s for LD chicks.

The LD chicks showed an increase in hourly food and water consumption beginning approximately six hours before the end of the light period, followed by a decrease in the last hour. A second peak in water intake was observed at the start of the period of illumination.

STATISTICAL STUDY OF DISTRIBUTION OF HENS AT FEEDERS : APPLICATION TO STANDARDS

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Study from photographs of interindividual distances between hens at feeders shows that distribution is characterized by a grouping round central values, if compared with random distribution. This grouping seems to be due to a distribution of maximum spacing pattern when the