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## **ABSTRACTS**

**TI:** INFLUENCE OF MINERAL-VITAMIN FODDER ADDITION ON SOWS REPRODUCTIVE PERFORMANCE IN INDUSTRIAL FARM

**AU:** Akińcza J., Gajewczyk P.

**AD:** Department of Pigs Breeding, Wrocław University of Environmental and Life Sciences

**LA:** Polish

**AB:** The paper presents an attempt of establishing of an influence of supplementing mixture addition to the fodder in farm conditions on the indices of sows reproductive performance and piglets rearing. The study included 60 multiparous crossbred (LPW × PL) sows, 30 of them constitutes the control group and 30 the experimental one. Each sows from the experimental group, after piglets weaning and 10 days after mating, obtained 100 g of supplementing mixture per day mixed with complete fodder. The mixture was given to the sows in order to improve reproduction – related indices. The sows were controlled until the confirmation of mating effectiveness in the subsequent reproduction cycle. It was noted that the experimental sows born and reared higher number of piglets in a litter, and the differences were confirmed statistically at  $p < 0.05$ . The supplementing fodder would have affected the course of low pregnancy, since no mummified piglets were noted in the experimental sows. Lower number of still piglets born was noted in the experimental litters compared to the litter of control group sows. Tested supplementing fodder probably improves mineral balance and positively affects sows metabolism.

**DE:** sows, supplementing fodder, reproductive performance

**SO:** Zesz. Nauk. UP Wroc., Biol. Hod. Zwierz., LXVIII, 593: 9–14.

**TI:** MORPHOGENESIS OF FOLIATE PAPILLAE ON THE RABBIT TONGUE (ORYCTOLAGUS CUNICULUS F. DOMESTICA)

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**LA:** Polish

**AB:** In this study was undertaken to examine the morphogenesis of foliate papillae on the rabbit tongue, *Oryctolagus cuniculus f. domestica*. The first symptoms of formation of the rudiments of foliate papillae were observed at day 22 of prenatal development of the rabbit. They were consisted of some parallel primary epithelial streaks. The connective tissue core was formed by broken folds. At day 26 of prenatal development study showed the secondary epithelial streaks. The Folds of connective tissue were unbroken. Starting from day 1 of postnatal life of the rabbit, the connective tissue core of each folium of foliate papillae was formed by three folds – one central fold and two lateral folds. These folds were arranged between epithelial streaks. The individual folia of foliate papillae were arranged parallel to one another and separated by clear furrows. Developing papillae composed from 15 to 21 folia of the foliate papillae.

DE: foliate papillae, development, LM, SEM  
SO: Zesz. Nauk. UP Wroc., Biol. Hod. Zwierz., LXVIII, 593: 15–25.

TI: MORPHOMETRIC PARAMETERS ANALISYS OF ARABIAN FOALS BORN IN MICHAŁÓW STUD IN 1995–2009

AU: Śpiewak J., Jagła E., Dobrowolski M., Łowicka O., Geringer de Oedenberg H.

AD: Department of Horse Breeding and Riding, Wrocław University of Environmental and Life Sciences

LA: Polish

AB: The aim of this study was to determine the relations between some reproduction rates like age of mare, duration of pregnancy and gender of foal and morphometric parameters of nursling Arabian Horses.

The study included 1067 foals born in Michałów Stud during the years 1995–2009. From breeding's documentations results of morphometric measurements such as body weight, height at withers, chest circumference, cannon circumference were obtained. We estimated index of girth's chest circumference and index of boniness according to Walkowicz and Jodkowska (2001).

Data were analyzed in Statistica 10.0 program using univariate analysis of variance (ANOVA). Statistical significance of results was determined with Duncan test.

Our experimental data suggest that foals from short pregnancy were lower in weight but more massive than foals from long pregnancy and very long pregnancy. Simultaneously our analysis indicated that younger mares give birth foals which have the lowest body weight, height at withers and chest circumference.

DE: Michałów Stud, morphometric parameters, Arabian foals

SO: Zesz. Nauk. UP Wroc., Biol. Hod. Zwierz., LXVIII, 593: 27–31.

TI: CRYOPRESERVATION OF CANADA GOOSE (*BRANTA CANADIENSIS* L.) SEMEN

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LA: English

AB: The aim of this study was to evaluate the use of Canada goose (*Branta canadensis* L.) sperm cryopreservation method in the case of White Kołuda® gander semen. Tests were performed on 7 *Branta canadensis* L. geese aged between 4 to 10 years. Semen was collected by dorso – abdominal massage, and then pooled ejaculate was diluted with EK diluents in the ratio of 1:0.5. Then the diluted semen was cooled at 4°C for 15 minutes. Next the dimethylformamide (DMF) of a final concentration of 6% was added to the semen. After the addition the covering agent the semen hoisted to 0.25 ml straws and equilibrated for 5 minutes at 4°C. Freezing of sperm took place in cryogenic chamber at a speed of 60°C/min from 4°C to -140°C, and then the straws of the semen were moved into liquid nitrogen (-196°C), to the deep freeze.

After freezing – thawing of semen a decrease in morphological quality of semen was observed. The average share of total live spermatozoa in the unfrozen semen decreased significantly ( $P < 0.05$ ) by 29.8 percentage points, as well as properly shaped spermatozoa (PSS) average share of 17.5 percentage points.

Sperm cryopreservation method used by Canada goose in relation to fresh semen, resulted in reduction of the share in total live spermatozoa and properly shaped ones, but the share of these categories in the frozen – unfrozen sperm (respectively 54.7 and 27.6%) can be considered as promising, giving rise to a eggs fertilization after the insemination.

DE: ducks Canada goose, semen quality, semen cryopreservation

SO: Zesz. Nauk. UP Wroc., Biol. Hod. Zwierz., LXVIII, 593: 33–48.