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## **ABSTRACTS**

- TI: THE ANALYSIS OF HAIR COAT OF DAUBENTON'S BAT (MYOTIS DAUBENTONII)
- AU: Jankowska D.<sup>1</sup>, Janczak M.<sup>1</sup>, Patkowska-Sokoła B.<sup>1</sup>, Bodkowski R.<sup>1</sup>, Czyż K.<sup>1</sup>, Kokurewicz T<sup>2</sup>
- AD: <sup>1</sup> Institute of Animal Breeding, Wrocław University of Environmental and Life Sciences <sup>2</sup> Institute of Biology, Wrocław University of Environmental and Life Sciences
- LA: English
- AB: The aim of the study was to analyze the hair coat of Daubenton's bat with respect to its adaptative significance. The main attention was paid to the diversity of hair in that animals hair coat, and also to their histological structure and thickness. Eight kinds of different hair types were observed, differing with their thickness and histological structure. All analyzed hairs were characterized by the lack of medulla, and were filled with cortex layer. The thickness of hair observed in the present study was within the range of 4.90 to 11.40 µm, while the number of scales in 1 mm of hair varied from 68 to 222. The chemical analysis performed using X-ray analyzer demonstrated that the most abundant elements in bats hair were carbon, oxygen and sulfur that are main elements forming hair keratin.
- DE: Daubenton's bat, *Myotis daubentonii*, hair coat, hair thickness, scales arrangement, chemical elements content
- SO: Zesz. Nauk. UP Wroc., Biol. Hod. Zwierz., LXXV, 604: 9–16.
- TI: THE DEVELOPMENT OF THE SELECTED INDICATORS OF FERTILITY OF COWS WITH USING A VARIETY OF PROGRAMS TO DETECT OF ESTRUS
- AU: Czub Jankowska M., Sawa A., Neja W., Kudła L.
- AD: UTP University of Science and Technology in Bydgoszcz
- LA: Polish
- AB: The study was conducted during 2012–2013 with 544 Holstein-Friesian cows of Black-and-White variety, which were kept in a loose-housing system on two farms belonging to a single owner and located in the Kujawsko-Pomorskie province. In 2012, the herd on both farms was managed using the ALPRO system. In 2013, this system was replaced on the first farm with a newer program for detecting increased activity using NEDAP LACTIVATOR pedometers attached to the cow's legs. On the second farm, the ALPRO system was expanded with the Medria Elevage system, in which motion sensors are placed on the collar attached to the neck of the animal, just like in the ALPRO system. Fertility of the cows was analysed before and after the changes. Statistical analysis used the GLM procedure of SAS package. Cow fertility was found to improve as a result of using newer heat detection systems. The service period was shortened during the year from 77 to 36 days, and the cows conceived in the second estrus after the first insemination, and not in the third or fourth estrus as happened before the change. The calving interval and days open were shortened by around 2 months, thus giving a better economic result. The dose of semen needed for conception was also found to decrease, which reduced the semen purchase costs.
- DE: indicators of fertility of cows, estrus, programs to detect of motor activity
- SO: Zesz. Nauk. UP Wroc., Biol. Hod. Zwierz., LXXV, 604: 17–24.

- TI: CHARACTERIZATION OF BODY CONSTITUTION OF POLISH LOWLAND SHEEP BRED IN PODLASKIE VOIVODESHIP
- AU: Kulesza D.<sup>1</sup>, Niżnikowski R.<sup>1</sup>, Świątek M.<sup>1</sup>, Ślęzak M.<sup>1</sup>, Kamiński J.<sup>2</sup>, Nieradko M.<sup>2</sup>, Czub G.<sup>1</sup>, Głowacz K.<sup>1</sup>,
- AD: <sup>1</sup> Sheep and Goat Breeding Division, Warsaw University of Life Sciences <sup>2</sup> Polish Union of Sheep Farmers in Białystok
- LA: English
- AB: The study was conducted in two herds of Żelaźnieńska Sheep, two herds of Corriedale Sheep and three herds of Polish Lowland Sheep of Podlasie region. Totally 489 ewes were examined, included 151 ewes of Corriedale Sheep, 154 ewes of Żelaźnieńska Sheep and 184 ewes of Polish Lowland Sheep of Podlasie Region. Among 37 of all examined rams were: 10 rams of Corriedale Sheep, 13 rams of Żelaźnieńska Sheep and 14 rams of Polish Lowland Sheep of Podlasie Region. Ewes were aged from 2 to 10 years, and the rams were aged from 2 to 8 years. Animal of both sexes were weighed and the body measurements at live animals were collected according to Fiszdon i Niżnikowski (1996). Based on the survey it was found: leveled body weight in all sheep breeds within sexes, the heigher value of measurement of head and foreshank in Corriedale Sheep, the broadest and deepest chest and smaller length of body in Żelaźnieńska Sheep and the higher withers height in Polish Lowland Sheep of Podlasie region. The obtained results showed far-reaching differences in the measurements indicating a clear difference in the exterior although adjusted body weight in all three breeds of sheep.
- DE: body measurements, Podlaska Sheep, Corriedale, Żelaźnieńska Sheep
- SO: Zesz. Nauk. UP Wroc., Biol. Hod. Zwierz., LXXV, 604: 25–32.
- TI: ANALYSIS OF REPRODUCTIVE USE OF POLISH KONIKS AT LOWER SILESIA AND SOUTHERN WIELKOPOLSKA
- AU: Śpitalniak K.<sup>1</sup>, Geringer de Oedenberg H.<sup>2</sup>, Kupczyński R.<sup>1</sup>, Kik I.<sup>3</sup>
- AD: <sup>1</sup> Department of Environment, Hygiene and Animal Welfare, Wrocław University of Environmental and Life Sciences
  - <sup>2</sup> Institute of Animal Breeding, Department of Horse Breeding and Equestrian Studies, Wrocław University of Environmental and Life Sciences
  - <sup>3</sup> State Plant Health and Seed Inspection in Opole
- LA: Polish
- AB: The aim of this thesis was examined the rates of reproduction and productivity. The study comprehended 127 Polish Koniks which have been bred in the years 1990–2011 at Lower Silesia, and southern Wielkopolska. The average values of the reproductive and productivity for the examined mare has been calculated as follows: pregnancy 93.7%, fertility 93.2%, prolificacy 88.9%, the indices of infertility 6.7%, the indices of abortions 1.3%, the indices of stillbirth 0.2%, the indices of rearing 94.5%. The highest results have been obtained from breeding mares from the line Białka, Bona, Misia II, Ponętna, Popielica, Tunguska and Tygryska (fertility, prolificacy, pregnancy amounted to 100%). Disturbing the results have been reported in case of mares from Dzina I line lines hours and 63.6%, fertility 63.6% and 45.5% fertility. To examine the affection of the factors such as line, race, and family characteristics on the obtained values and indicators, data has been described using statistical tests.
- DE: Polish Koniks, line of genealogy, reproductive use
- SO: Zesz. Nauk. UP Wroc., Biol. Hod. Zwierz., LXXV, 604: 33–44.