ABSTRACTS

TI: VARIABILITY IN CHEMICAL COMPOSITION OF MILK OF SOWS DEPENDING ON BREED, TEAT, AND THE SIDE OF MAMMARY GLAND, AND RESULTS OF PIGLETS REARING
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LA: Polish
AB: Piglets rearing is conditioned by zootechnical-health factors, and lactation yield of sows, i.e. amount and composition of milk produced by sows.
The aim of the present study was to determine the composition of milk of sows of Polish Large White (PLW) and Polish Landrace (PL) breeds and F₁ crossbreds (PLW x PL) collected in 10th day of lactation from different teats, and also an attempt to establish relationships between milk composition and results of piglets rearing. The experiment was conducted on three groups of primiparous sows: I – Polish Large White (10 heads), II – Polish Landrace (10 heads), III – F₁ crossbreds (PLW x PL) (10 heads). Fat content in milk of crossbreed sows (10.37% on average) was highly significantly higher (p≤0.01) comparing to milk of sows of PLW and PL breeds (9.11 and 9.92% on average, respectively). Protein concentration in milk of PL breed sows (5.15% on average) was highly significantly higher than in the case of PLW and F₁ sows (4.85% in both cases on average). Milk collected from the three different teats did not differ in statistically significant manner. Milk obtained from both sides of mammary gland did not demonstrate any statistically significant differences after its analysis. Statistically significant correlations between the content of analysed milk components were observed.

DE: sows, mammary gland, milk composition, piglets rearing

TI: ERYTHRÆOIDEA (ACARI: PROSTIGMATA: PARASITENGONA) OF FINLAND – STATE OF KNOWLEDGE AND NEW DATA
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LA: English
The mites of Erythraeoidea of Finland were studied. All of the scarce and unconfirmed data on the occurrence of Erythraeoidea mites in Finland were assembled and supplemented with present research data. In Finland, Erythraeoidea are represented by 22 species: 21 species belong to Erythraeidae family, and one species to Smarididae. The presence of 10 species previously indicated in literature was confirmed. Furthermore, the study revealed the occurrence of 10 species new to the fauna of Finland. For four species, active postlarval stages that have not been described in the literature previously, were discovered.
A NEW GENUS AND TWO NEW SPECIES OF MITES (ACARI: PROSTIGMATA: ERYTHRAEIDAE) FROM MACEDONIA AND THE REPUBLIC OF CAPE VERDE

Nagoricanella n. gen. and two new species of mites: Nagoricanella egoni n. sp. from Macedonia and N. arabellae n. sp. from the Republic of Cape Verde are described and illustrated.

NEW RECORDS OF MITES (ACARI: PROSTIGMATA: ERYTHRAEIDAE, EUTROMBIDIIDAE, MICROTROMBIDIIDAE, PODOTHROMBIIDAE, TROMBIDIIDAE) FROM BULGARIA, MACEDONIA AND ROMANIA

Erythraeus (Erythraeus) smolyaniensis sp. n. from Bulgaria is described. Hauptmannia kazimierae Haitlinger, H. wratislaviensis Haitlinger, Erythraeus (Zaracarus) budapestensis Fain & Ripka, Charletonia cardinalis (Pallas), Balaustium nikae Haitlinger, Allothrombium poliarkpi Haitlinger, Paratrombium mnegalochirum (Berlese), Podothrombium tymoni Haitlinger, P. kordulae Haitlinger and Valgothrombium tarnavense Feider are new for Bulgaria; Erythraeus (Erythraeus) jowitae Haitlinger, C. krendowskyi (Feider), Leptus (Leptus) mariae Haitlinger, L. (L.) ignotus (Oudemans) and Allothrombium fuliginosum (Hermann) are new for Macedonia and Abrolophus quisquiliaris kiejstuti Haitlinger, A. norvegicus (Thor), H. kazimierae, H. wratislaviensis, Grandjeanella multisetosa Zhang & Goldarazena, E. (E.) jowitae, E. (E.) monikae Haitlinger, L. (L.) mariae, B. nikae, Trombidium latum C. L. Koch and Eutrombidiid traronum (Hermann) are new for Romania.

NEW SPECIES OF MITES (ACARI: ASTIGMATA: HETEROCOPTIDAE) FROM INDO-AUSTRALIAN REGION

Heterocoptes floresiensis sp. n. from Flores, Indonesia, H. ruperti sp. n. from Sumatra, Indonesia and H. rukaensis sp. n. from Papua New Guinea are described. H. tarsi is new for the fauna of Indonesia. The female of H. tarsii is described and new hosts and measurements for specimens from Indonesia are given.

DE: Acari, Erythraeidae, Nagoricanella, new genus, new species, Macedonia, Republic of Cape Verde

DE: Acari, Erythraeidae, Eutrombidiidae, Microtrombidiidae, Podothrombiidae, Trombidiidae, Bulgaria, Macedonia, Romania, new species, new records

DE: Acari, Heterocoptidae, Heterocoptes, Indonesia, Papua New Guinea, new species
TI: SPECIES COMPOSITION OF PARASITENGONA TERRESTRIA (ACARI: TROMBIDIFORMES) IN SELECTED HABITATS OF ŻMIGRODZKA VALLEY

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LA: Polish

AB: Mites of terrestrial Parasitengona group (Acari: Actinotrichida: Prostigmata), inhabiting two types of habitats: patches of meadow vegetation and woodland copses, were considered in the analysis. The material was collected with pitfall traps or directly, during two vegetation seasons. Out of 147 species representing the Polish fauna of Parasitengona terrestria, seven – representatives of Erythraeidae, Trombidiidae and Podothrombiidae – were recorded from the study area. The effectiveness of collecting with pitfall traps was confirmed in relation to Erythraeidae and Podothrombiidae.

DE: mites, Erythraeidae, Trombidiidae, Podothrombiidae, meadow, woodland copses, biocenotic indices


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TI: THE INFLUENCE OF GENDER ON RESULTS OF AFTER SLAUGHTER EVALUATION AND FATTENING FEATURES OF CROSSBREEDS PIG

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AB: The object of his study was to determine slaughter value and fattening characteristics of pig crossbreeds in relation to gender. Obtained results suggest that investigated population reached higher meatiness level than found in general country population. Values of certain slaughter and fattening traits differ depending on gender, however only some of stated differences were statistically important. Performed research confirmed that sow carcasses had lower fat deposition and higher meatiness. During fattening sows gain lower daily grains than hogs.

DE: pig breeding, fattening performance, slaughter performance, crossbreeding, gender


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TI: AGRICULTURE AS FUNDAMENTAL SUBSYSTEM OF AGROBUSINESS

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AB: Agriculture is becoming more specialized and requires a business activity. Today’s non-agricultural operators have entered into sphere of food production, purchase and keep large farms. Subsystem of agrobusiness is creating great opportunities for development, as the renewable agricultural resources can be used to produce variable products, not only food.

DE: agriculture, agrobusiness

TI: BREEDING BIRDS OF THE BOTANIC GARDEN IN WROCŁAW
AU: Grzegorz Kopij, Monika Zendwalewicz
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LA: Polish
AB: Breeding bird community of the Botanic Garden of Wrocław (7.48 ha) has been quantified in the year 2007 by means of the mapping method. The Botanic Garden is located in the city centre and was founded in 1811. A total of 27 species has been recorded. Eudominants (41.4% of all breeding birds) were represented by *Sturnus vulgaris*, *Passer montanus* and *Columba palumbus*. The group of dominants (together 28.4%) was formed by *Passer domesticus*, *Parus major*, *Parus caeruleus* and *Turdus merula*. In three seasons: 1857, 1957 and 2007, a total of 84 bird species were recorded, about half of them were breeding (14 spp. regularly breeding and 27 spp. not regularly breeding). Around 1857, 30 breeding and 40 non-breeding species, in 1957: 30/26 spp., and in 2007: 27/14 spp. were recorded. It looks, therefore, as if the species diversity has been in decline over the past 150 years. However, the number of breeding species (27–30 spp.) have not changed significantly over this period. In all three seasons compared, the following species were breeding: *Parus major*, *Carduelis chloris*, *Columba palumbus*, *Sylvia atricapilla*, *Phoenicurus ochruros*, *Turdus merula*, *Sitta europaea*, *Parus caeruleus*, *Muscicapa striata*, *Sylvia curruca*, *Phoenicurus phoenicurus*, *Sturnus vulgaris*, *Passer domesticus* and *Hippolais icterina*.

DE: breeding bird communities, censuses, urban ornithology, Wrocław

TI: QUANTITATIVE STUDIES ON BIRDS BREEDING IN SUBURBS OF LADYBRAND, EASTERN FREE STATE, SOUTH AFRICA
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AB: In September 1998, the line transect method was employed to assess densities and dominance of birds breeding in Ladybrand, a town situated in the eastern Free State province, South Africa. A total of 34 bird species were recorded as breeding resident. Three Streptopelia doves, *Columba guinea*, *Passer domesticus* and *Ploceus velatus* constituted a group of dominants. Relatively common were also *Onychognathus morio*, *Spreo bicolor*, *Sturnus vulgaris*, *Ploceus capensis* and *Urocolius indicus*. However, *Cossypha caffra*, *Turdus olivaceus*, *Zosterops palidus*, *Telophorus zeylonus*, *Columba livia f. domestica*, *Passer melanurus*, *Passer griseus* and canaries were found to be relatively uncommon.

DE: bird communities, grasslands, urban ornithology

TI: EFFECTS OF PERFORMANCE OF POLISH HOLSTEIN-FRESIAN AND POLISH RED-WHITE BREED COWS MAINTAINED IN THE SAME TECHNOLOGICAL CONDITIONS
AU: Marian Kucza³, Waclaw Łuczak², Krystyn Chudoba¹, Robert Kupeczyński³, Paulina Jawor⁴, Anna Rząsa⁴

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Research covered 150 cows from 2 loose barns in Sudeten Submountain. Cows belonged to 2 performance types, i.e. milk one – Polish Holstein-Friesian breed of red-white variety (RW), and meat-milk – Polish Red-White breed (ZR) were maintained in the same environmental conditions. It was observed that milk and protein yield (in I and II 305-days lactation), yield of FCM milk and economic EJR value (in I lactation) obtained by cows of ZR breed were significantly lower as compared to cows of RW breed. Efficiency of genotype of RW breed cows, with feeding similar like in the case of cows of ZR breed, will not assure a predominance in life yield of milk, fat and protein, and in obtaining a profitable indices of reproduction and functional features. Cows of ZR breed are younger at first calving, have a bit sorter calving intervals, significantly lower culling factor, and a mean number of calvings and the period of their performance are significantly longer than in cows of RW breed. Husbandry of ZR breed cows turned out to be useful in difficult climatic-soil conditions of Sudeten Submountain, thus is worth a recommendation. On the area of southern Poland, in breeding environment predisposed to an extensive production, transformation of a considerable percentage of dairy cattle population into combined milk-meat performance type is justified.
The aim of the work was a determination if water nanosilver solution may be applied in a prevention of chalkbrood of honey bee colonies. The study was conducted on bee colonies where clinical symptoms of chalkbrood were stated. In 5 bee colonies the solution of nanosilver in a spray form of a concentration of 30 ppm in 5 colonies – 50 ppm was used, and 3 colonies were control ones, without a treatment. Nanosilver solution was applied in a form of spray on honeycombs with bees and a brood and on internal walls of hives. The treatment was conducted 5 times, in 5-days intervals. One day after spraying and on a day of the subsequent spraying (before the treatment) the inspection was done, and mummies of petrified larvae present in honeycombs were counted.

After nanosilver solution application of a concentration of 30 ppm, any distinct differences in a number of bee larvae mummies found in honeycombs were observed. More differentiated results were obtained in groups where a solution of a concentration of 50 ppm was used. After five days from the last spraying with nanosilver no even one mummy was found in a one bee colony, and in two others 3–5 mummies on one side of a honeycomb were noted. In turn, in the two remaining colonies the negligible changes in a number of petrified larvae were demonstrated – 7–9 petrified larvae.

The result of nanosilver solution application was a distinct increase in Ag concentration in organisms of worker bees and in honey – in bees from a concentration of <0.07 µg/g d.m. to 4.28–5.62 µg/g d.m., and in honey from <0.03 µg/g d.m. to 0.38–1.57 µg/g d.m. Any negative influence of a high level of silver on an organism of a bee was observed.

This paper analyzes the pedigrees of Silesian horses, born between 1976 and 1998 in order to determine the frequency of common ancestors and the extent of inbreeding in the population, against the origin of the horses, pedigree, their age and gender. The following parameters were calculated for individual horses: the number of inbreeding paths, partial and total inbreeding coefficients. It was shown that the half of the examined population (54%) came from parents related through at least one common ancestor, at the mean value of total inbreeding coefficient at 1.26% (range from 0% to 18.3%). The mean number of inbreeding paths was 1.69 per each horse, (range from 0% to 11%). It was also observed that in the modern population of Silesian horses, lines are not fixed through systematic inbreeding. Numerous cases of common ancestors on the sides of father and mother were connected with the effect of the breeding background (inbreeding of the founding breeds).
The paper contains the results of studies on antioxidative efficiencies of baicalin and extract from root of scullcap (*Scutellaria baicalensis*). The results obtained show that both compounds exhibit very good antioxidative activity and can be used as efficient free radical scavengers in therapeutics. Also possible mechanism of the shape transitions of erythrocyte induced by both compounds is discussed.