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ABSTRACTS

BIOLOGY

TI: CAN THE HUMAN BODY HEIGHT BE A PREDICTOR OF THE LIFE EXPECTANCY?

AU: Borysławski K.^{1,2}, Chmielowiec K.³

AD: 1. Department of Anthropology, Institute of Biology, Wrocław University of Environmental and Life Sciences

2. Institute of Natural Sciences, Wrocław University of Environmental and Life Sciences

3. Regional Specialist Hospital for Neurotic and Mentally Diseases in Cibórz (Poland)

LA: Polish

AB: The material was collected on the basis of archived medical documents from 1960 to 2000 in the Independent Health Care Institute of Regional Specialistic Hospital for Neurotic and Mentally Ill in Ciborz (Poland). The most of patients (74%) is completely healthy and stayed in the hospital only with care and social indicators. Other may also be considered to be somatic healthy. Between these groups of patients there were no significant statistical differences. The fact that the investigated persons were during 25 years in the same environmental conditions undoubtedly raises the value of this unique material. Two types of material were collected.

1. Longitudinal – includes 142 individuals (68 men and 74 women). For each person, the data was collected on a continuous basis at intervals of 5 years from 45 to 70 years of age.

2. Cross-sectional – includes 225 individuals (113 men and 112 women) with 4 different categories of life.

On the basis of longitudinal data you can see growing with age, statistically significant loss of body height in both sexes, while the cross-sectional material allowed the assessment of relationship between body height and the life expectancy. It appears more likely that higher individuals will have greater life expectancy, men especially. This result is discussed on the basis of many items of literature, which described two contrasting types of relationships between body height and life expectancy.

DE: life expectancy, human body height, longitudinal data, aging, changes with age

SO: Zesz. Nauk. UP Wroc., Biol. Hod. Zwierz., 2010, LX, 577, 11–22.

TI: SECONDARY SEX RATIO AMONG CHILDREN OF MEN WORKING AT COMPUTER SCREENS

AU: Borysławski K.^{1,2}, Dubina T.¹

AD: 1. Department of Anthropology, Institute of Biology, Wrocław University of Environmental and Life Sciences

2. Institute of Natural Sciences, Wrocław University of Environmental and Life Sciences

- LA: Polish
- AB: The aim of this study was to estimate the relationship between the sex of the child and the level of exposure of fathers to electromagnetic radiation emitted by computer equipment (monitors). The study included 109 men with at least one child each. The respondents were divided into two groups according to the exposure: 1) low exposure – using safe monitors and working at a computer for up to 40 hours per week, and 2) high exposure – the others. It was found that fathers exposed to electromagnetic radiation had statistically significantly higher number of daughters than those that were not (exposed to radiation). This applies to all first born children as well as all the subsequent ones.
- DE: secondary sex ratio, SSR, electromagnetic radiation, computer equipment
- SO: Zesz. Nauk. UP Wroc., Biol. Hod. Zwierz., 2010, LX, 577, 23–30.
- TI: ARTHROPODS (*ACARI*, *ANOPLURA*, *SIPHONAPTERA*) OF SMALL MAMMALS OF THE ŚWIĘTOKRZYSKIE PROVINCE
- AU: Haitlinger R.
- AD: Department of Systematics and Ecology of Invertebrates, Wrocław University of Environmental and Life Sciences
- LA: English
- AB: The aim of this study was to estimate the relationship between the sex of the child and the level of exposure of fathers to electromagnetic radiation emitted by computer equipment (monitors). The study included 109 men with at least one child each. The respondents were divided into two groups according to the exposure: 1) low exposure – using safe monitors and working at a computer for up to 40 hours per week, and 2) high exposure – the others. It was found that fathers exposed to electromagnetic radiation had statistically significantly higher number of daughters than those that were not (exposed to radiation). This applies to all first born children as well as all the subsequent ones.
- DE: *Acari*, *Anoplura*, *Siphonaptera*, mammals, Świętokrzyskie province, faunistic
- SO: Zesz. Nauk. UP Wroc., Biol. Hod. Zwierz., 2010, LX, 577, 31–48.
- TI: NEW RECORDS OF MITES (*ACARI*: *PROSTIGMATA*: *ERYTHRAEIDAE*, *TROMBIDIIDAE*) FROM TURKEY, WITH DESCRIPTIONS OF FOUR NEW SPECIES
- AU: Haitlinger R.
- AD: Department of Systematics and Ecology of Invertebrates, Wrocław University of Environmental and Life Sciences
- LA: English
- AB: *Erythraeus (Erythraeus) hilariae* sp. n., *E. (E.) elmalicus* sp. n., *Hauptmannia amilberti* sp. n. and *Grandjeanella emanueli* sp. n. are described. *E. (Zaracarus) passidonicus* and *E. (Z.) budapestensis* are reported for the first time from Turkey. New localities for *Allothrombium fuliginosum* and *A. triticium* are given.
- DE: *Acari*, *Erythraeidae*, *Trombidiidae*, *Erythraeus*, *Hauptmannia*, *Grandjeanella*, new species, new records, Turkey
- SO: Zesz. Nauk. UP Wroc., Biol. Hod. Zwierz., 2010, LX, 577, 49–62.
- TI: THE FIRST RECORD OF *POLLUX KOVALAMICUS* HAITLINGER, 2002 (*ACARI*: *PROSTIGMATA*: *ERYTHRAEIDAE*) FROM INDONESIA
- AU: Haitlinger R.

AD: Department of Systematics and Ecology of Invertebrates, Wrocław University of Environmental and Life Sciences
LA: English
AB: *Pollux kovalamicus* for the first time is reported from Kekor Island and Babadaki Island, Indonesia.
DE: *Acari, Erythraeidae, Trombidiidae, Erythraeus, Hauptmannia, Grandjeanella*, new species, new records, Turkey
SO: Zesz. Nauk. UP Wroc., Biol. Hod. Zwierz., 2010, LX, 577, 63–66.

TI: AVIAN ASSEMBLAGES IN THE AREA AROUND THABANA NTLENYANA, THE HIGHEST PEAK OF SOUTHERN AFRICA

AU: Kopij G.

AD: Department of Vertebrate Ecology and Paleontology, Wrocław University of Environmental and Life Sciences

LA: English

AB: The study area was located on borders of the Mokhotlong and Thaba Tseka districts of Lesotho and KwaZulu Natal province of the Republic of South Africa, in the highest altitudes of the Maloti/Drakensberg Mountains. The area falls in Altitude Mountain Grassland. To date, no quantitative data on any vertebrate communities are available from this vegetation type. The line transects method has been employed on 27–30 December 2001 (rainy season) to quantify resident bird assemblages in the area around the highest peak of the mountains. Three study plots were designed: just around the Thabana Ntlenyana peak (5 transects), in the Sani Top countryside (4 transects) and in the valley of the Sani River (3 transects). Around Thabana Ntlenyana 23 species were recorded, with *Emberiza capensis* as eudominant (22%). In the Sani Top countryside – 30 species, with *Anthus cinnamomeus* and *Galerida magnirostris* as eudominants (17.8% and 14.2% respectively). In the Sani River valley, 24 species, with *Saxicola torquata* (16.7%) and *Motacilla capensis* (11.9%) as eudominants. In each plot the group of dominants was composed of the following other species: *Chaetops aurantius*, *Cercomela sinuata*, *Pseudochloroptila symonsi*, *Monticola explorator* and *Galerida cristata*. Contrary to expectation, both in terms of the biomass and the number of individuals, the insectivores are the most representative feeding guild. The dominance structure of the breeding communities appears to be much the same in all recognized microhabitats all over the Altitude Mountain Grassland.

DE: Lesotho, Maloti, Drakensberg, bird assemblages, mountain grassland

SO: Zesz. Nauk. UP Wroc., Biol. Hod. Zwierz., 2010, LX, 577, 67–76.

TI: PTAKI LĘGOWE PÓŁNOCNO-WSCHODNIEJ CZĘŚCI DZIELNICY FABRYCZNA WE WROCŁAWIU

AU: Kopij G.

AD: Department of Vertebrate Ecology and Paleontology, Wrocław University of Environmental and Life Sciences

LA: Polish

AB: W okresie od marca do lipca 2005 r. przeprowadzono badania nad liczebnością i rozmieszczeniem ptaków gniazdujących w północno-wschodniej części dzielnicy Fabryczna we Wrocławiu (750 ha). W badaniach zastosowano uproszczoną wersję metody kartograficznej. Wykazano łącznie 73 gatunki ptaków lęgowych. Do grupy gatunków najliczniejszych zaliczono wróbla, gołębia miejskiego, jerzyka, bogatkę, modraszkę, oknówkę, mazurka

i szpaka. Wśród innych liczniejszych gatunków, gniazdujących w zagęszczeniach wyższych niż 3,0 pary/100 ha, były sierpówka, grzywacz, sroka, wrona, kopciuszek, kos, kapturka i zięba. Do gatunków szczególnie cennych (z Załącznika 1 Dyrektywy Ptasiej) należy zaliczyć łąbądzia niemego, zimorodka, dzięcioła zielonosiwego, dzięcioła czarnego, dzięcioła średniego, muchołówkę białoszyją, gąsiorka i remiza. W porównaniu z innymi terenami Wrocławia, o podobnej wielkości powierzchni, bogactwo gatunkowe ptaków północno-wschodniej części dzielnicy Fabryczna jest dużo wyższe.

DE: cenzusy, ornitologia miejska, Wrocław

SO: Zesz. Nauk. UP Wroc., Biol. Hod. Zwierz., 2010, LX, 577, 77–96.

TI: SEX RATIO IN POPULATION OF *LACERTA VIVIPARA* (JACQUIN, 1787) (SAURIA, LACERTIDAE) IN A LOWLAND HABITAT OF THE VICINITY OF WROCŁAW, SW POLAND

AU: Maślak R.¹, Paśko Ł.¹, Kuszniierz J.¹, Moska M.²

AD: 1. Institute of Zoology, Wrocław University

2. Department of Genetics and Animal Breeding, Wrocław University of Environmental and Life Sciences,

LA: English

AB: Studies concerning, among others, the sex ratio in a selected population of *Lacerta vivipara* were carried out during four years in the vicinity of Wrocław (SW Poland). The results show that adult sex ratios are male-biased. Assuming prevalence of males among juveniles and yearlings would be burdened with too great error. Reasons for this phenomenon are discussed. The most probable factors determining male-biased sex ratio in studied population seem to be intersexual competition and its impact on female survival and possibly effect of predation. The predation hypothesis is supported by the data on the proportion of males and females with regenerated tails. The proportion is as high as 45.8% in females and only 36.7% in males. This may indicate that females are really more often wounded. Our results confirm that in a lowland populations mean adult mortality is usually lower in males.

DE: Lacertidae, *Lacerta vivipara*, *Zootoca vivipara*, sex ratio

SO: Zesz. Nauk. UP Wroc., Biol. Hod. Zwierz., 2010, LX, 577, 97–106.

TI: SEX RATIO IN POPULATION OF *LACERTA VIVIPARA* (JACQUIN, 1787) (SAURIA, LACERTIDAE) IN A LOWLAND HABITAT OF THE VICINITY OF WROCŁAW, SW POLAND

AU: Maślak R.¹, Paśko Ł.¹, Kuszniierz J.¹, Moska M.², Heulin B.³, Surget-Groba Y.⁴

AD: 1. Institute of Zoology, Wrocław University

2. Department of Genetics and Animal Breeding, Wrocław University of Environmental and Life Sciences

3. CNRS UMR 6553, Station Biologique de Paimpont, Paimpont, F-35380, France

4. Department of Zoology and Animal Biology, University of Geneva

LA: English

AB: Eight populations of the sand lizard (*Lacerta agilis*) from Poland (allozymes and cytochrome b gene sequences) and 18 populations from Poland, Slovakia, Austria, Hungary, Croatia, Italy, France and Russia (dloop region sequence) were studied. The level of allozyme polymorphism is very low. It was only found in two loci of two enzyme systems (MOD and PGD) among the 8 loci studied and only in two populations from North-Eastern

and Central-Eastern Poland. Bayesian Inference and additional phylogenetic analyses basing on cytochrome b gene and dloop region indicate clearly that haplotypes from these two populations form a separate clade. The study confirms the homogeneity of sand lizard populations in Central Europe (*L. agilis argus*) except for populations from NE and E of Poland (*L. agilis chersonensis*). Dloop analysis suggests the position of sand lizard from Croatia as *L. agilis bosnica*.

DE: *Lacerta agilis*, population genetics, allozymes, mtDNA, cytochrome b, dloop, phylogenetics, Central Europe

SO: Zesz. Nauk. UP Wroc., Biol. Hod. Zwierz., 2010, LX, 577, 107–124.

TI: BIOAKUMULACJA MIEDZI, NIKLU, KADMU, OŁOWIU I CYNKU W OSADACH DENNYCH ZBIORNIKA OWIESNO (WOJEWÓDZTWO DOLNOŚLĄSKIE)

AU: Senze M., Kowalska-Górska M., Zięba E.

AD: Institute of Biology, Department of Hydrobiology and Aquaculture, Wrocław University of Environmental and Life Sciences

LA: Polish

AB: Badania prowadzono na terenie miejscowości Owiesno w powiecie dzierzoniowskim w województwie dolnośląskim. Próbkę pobierano ze zbiornika wodnego w cyklu rocznym. Określono zawartość metali ciężkich (Cu, Ni, Cd, Pb, Zn) w wodzie i osadach dennych. Badane wody odznaczają się średnim stopniem zanieczyszczenia metalami ciężkimi. Poziom ten w wodzie w całym cyklu badań utrzymywał się w granicach ustalonych dla niezanieczyszczonych wód powierzchniowych. Notowane podwyższenia stężeń są najprawdopodobniej wynikiem sporadycznych, miejscowych zrzutów ścieków, co znajduje swe odbicie w jakości wody. Odczyn osadów dennych zawierał się w przedziale od kwaśnego po bliski obojętnemu. Zawartość metali w osadach dennych badanych wiosną, latem i jesienią utrzymywała się na poziomie I i II klasy czystości. W zimie zanotowano podwyższenie ilości badanych metali. Szczególnie wysokie wartości zanotowano w tym okresie dla miedzi i niklu i można je określić jako pozaklasowe.

DE: woda, osady denne, metale ciężkie

SO: Zesz. Nauk. UP Wroc., Biol. Hod. Zwierz., 2010, LX, 577, 125–134.

ANIMAL BREEDING

TI: BEHAVIOURAL ASPECTS OF MULE DUCK WELFARE AFTER INDUCTION AND TREATMENT OF MUSCULAR DYSTROPHY

AU: Bozakova N.¹, Gerzilov V.², Stoyanchev K.¹

AD: ¹ Department of General Animal Breeding, Trakia University, Stara Zagora

² Department of Animal Sciences, Agricultural University – Plovdiv

LA: English

AB: Poultry health is an essential element of poultry welfare. A reliable indicator of the latter is the behavior of birds.

The aim of the present study was to follow the behavioural changes of Mule ducks as welfare criteria after induction and treatment of muscular dystrophy. As far as we know, evaluation of welfare in Mule ducks with muscular dystrophy on the basis of their behavior has not been performed.

The study was performed on 40 Mule ducks, reared under comfortable microclimatic conditions. The birds were divided into two groups: group I (control group) and group II –

birds with alimentary induced muscular dystrophy. The rearing period lasted from the age of 1 to 74 days.

Mule ducks behavior was recorded by a video camera for 12 hours during two consecutive days (from 8 AM to 8 PM). The intake of food and water, lying, standing, movement, bathing, swimming, conflicts and preening of birds were observed.

The beginning of muscular dystrophy in group II was manifested at the age of 60 days with significantly higher number of lying Mule ducks and a lower number of walking birds compared to controls (<0.01). At this time the number of standing and bathing birds from group II was lower than in group I. Four days after the beginning of treatment, the number of lying Mule ducks decreased and the number of walking birds increased in group II vs. controls. At the age of 74 days (6 days after the end of the treatment) the difference in locomotor's reactions of birds from experimental and control groups disappeared.

The changes in locomotor's reaction of Mule duck's behavior are reliable indicators of their welfare.

DE: poultry welfare, muscular dystrophy, Mule ducks, behavior

SO: Zesz. Nauk. UP Wroc., Biol. Hod. Zwierz., 2010, LX, 577, 135–144.

TI: THE RESULTS OF REPRODUCTION PERFORMANCE OF PIGLETS REARING OBTAINED IN AN ORDINARY BREEDING CONDITIONS FROM NAJMA AND CROSSBREDS [P.L.W. X P.L.] SOWS 1

AU: Gajewczyk P., Madejek-Świątek E., Potyrała A.

AD: Institute of Animal Breeding, Wrocław University of Environmental and Life Sciences

LA: Polish

AB: Traits connected with reproduction are low heritable, that the keeping and feeding conditions of sires may have a definite influence on their exposure. The study covered a farm adapted in 90-ties for the needs of fatteners production in a closed cycle. Foundation stock included 160 sows. Until 2003 there were only crossbreds sows [P.L.W. x P.L.], and since 2004 its replacement has been conducted by an introduction of Najma sows.

An analysis of results of results of reproduction performance and piglets rearing for all the herd of sows [P.L.W. x P.L.] in 1997–2003 was conducted. Results obtained differed clearly from those obtained in reproductive breeding and were unstable each year.

In order to establish the size of differences in values of traits of reproduction performance and piglets rearing, crossbred sows [P.L.W. x P.L.] were compared to Najma sows that were present on a farm in 2004–2006. It should be acknowledged that with respect to most of indices of reproduction performance of sows, the crossbred sows [P.L.W. x P.L.] distinctly stood down in favor of Najma sows. Highly significant statistically differences were observed in this case between mean values of a number of born and reared piglets in a litter. A difference confirmed statistically ($P \leq 0.05$) was noted between mass of litter in 1st and 28th day of suckling piglets life.

DE: sows, reproduction performance, piglets rearing, breeding

SO: Zesz. Nauk. UP Wroc., Biol. Hod. Zwierz., 2010, LX, 577, 145–154.

TI: OBSERVATIONS OF BEHAVIOUR OF HUCUL HORSES HELD IN HERDS AND WEATHER INFLUENCE ON THEIR ACTIVITIES 1

AU: Henryk Geringer de Oedenberg H., Kamińska K., Bogucka L.

AD: Institute of Animal Breeding, Wrocław University of Environmental and Life Sciences

LA: Polish

AB: Studies based on observations of hucul horses behaviour, which have been kept in herds, in conditions similar to natural habitat of wild horses. Observations were carried out with two herds of hucul horses. First over two weeks in July and second over two weeks in September, both during daylight hours, between 9 a.m. and 6 p.m. Both herds consisted of a leading stallion and 11 mares with foals. Results of this observations shows, that hucul horses demonstrates the following activities on the pasture: grazing, resting, movement not related to motion during grazing, physiological performances, which are urination and defecation, and comfortable activity, such as plucking, rubbing and wallowing. Analysis of the results shows that most of the time both herds of hucul horses were grazing. Less time horses spend on resting, after that was moving and at the end were physiological and comfortable activities. After making the statistical calculations, it was found, in both herds, a highly significant correlations between time of grazing and time of resting and between time of physiological performances and time of grazing and resting. Calculations were also made to find correlations between weather factors and the behavior of hucul horses. It was found a significant effect of temperature and humidity especially in the grazing, resting, and physiological functions. During the observation the social hierarchy in both herds was referred and it was found that hierarchy was stable and depended on age and sex of horses.

DE: hucul horse, behaviour, weather influence, social hierarchy

SO: Zesz. Nauk. UP Wroc., Biol. Hod. Zwierz., 2010, LX, 577, 155–162.

TI: ANALYSIS OF YOUNG HORSES' BEHAVIOUR IN RACE TRAINING, TRAINING INFLUENCE ON BEHAVIOUR BEFORE RACE AND POSSIBILITY ACCOMODATION TO NEW ENVIRONMENTAL CONDITIONS 1

AU: Geringer de Oedenberg H., Kamińska K., Śpiewak J., Kehl K.

AD: Institute of Animal Breeding, Wroc aw University of Environmental and Life Sciences

LA: Polish

AB: This research was concentrated on individual reactions of each horse without considering gregarious. Because that individuality (psychic and physical) makes them so specific and forces careful approach to teaching and training of each and every racehorse.

The studies of behavior were performed on 45 young horses, which participated in the training race of 2008/2009, before that race and also before their first race on Wrocław Horse Race Track (WTWK) during the 2009 season. Behavior of the horses was evaluated in four – degree scale during walking in hand, bridling, saddling, mounting of jockey and in the walking machine, while training, during walking in paddock and then mounting of jockey and entering the starting gate before their first race.

The differences in horses' behavior between averages were highly significant. Those differences show, that horses have major ability to adapt to new environment conditions. Depending on time periods horses behave differently: they endure the two first months of training the worst and in the next period horses adapt quickly to the new situation and demands put on them during training.

DE: races, horses, behaviour

SO: Zesz. Nauk. UP Wroc., Biol. Hod. Zwierz., 2010, LX, 577, 163–172.

TI: SPORT AND BREEDING CAREER OF THE BEST STALLIONS FROM 100 DAY STALLION TEST IN 1999–2005 IN POLAND

AU: Geringer de Oedenberg H., Mazurek K., Kamińska K., Neuberg K., Pasicka E.

AD: Institute of Animal Breeding, Wroc aw University of Environmental and Life Science

LA: Polish

AB: One of the most important test of Stallion Testing-selective breeding test for young stallions were show in these thesis. The aim of this thesis was to monitor the sport and breeding career of 78 stallions, which finished the Stallion Tests on the first, second and the third position in 1999–2005. Four Equestrian disciplines have been taken under consideration: dressage, show jumping, eventing and carriage driving. On the basis of carrying out an analysis of offspring's results, the stallions breeding career was monitored. 54% didn't confirm their sports predispositions and 63% have failed in breeding because their offspring have not achieved required results.

DE:: stallions, 100 Day Stallion Test, sport, breeding

SO: Zesz. Nauk. UP Wroc., Biol. Hod. Zwierz., 2010, LX, 577, 173–180.

TI: EFFECT OF BREEDING CONDITIONS AND PHENOLOGY ON THE INVASIONS OF STRONGYLID NEMATODES IN HORSES FROM SELECTED STABLES OPOLSKIE PROVINCE AND WROC AW

AU: Jagła E.¹, Popiołek M.^{2,3}, Knecht D.¹, Łuczyński T.², Jarnecki H.²

AD: ¹ Institute of Animal Breeding, Wrocław University of Environmental and Life Sciences

² Institute of Biology, Department of Invertebrate Systematics and Ecology, Wrocław University of Environmental and Life Sciences

³ Institute of Natural Sciences, Wrocław University of Environmental and Life Sciences

LA: Polish

AB: Comparative faecal analysis – based research on the occurrence of helminths in horses was conducted in three stables, which differ in their breeding system: (1) outdoor housing, (2) indoor housing and (3) combined – outdoor/indoor system. An examination of 107 faecal samples revealed the presence of strongylid nematodes. The prevalence was 62,6% and the average number of eggs per sample being 163,8 (range: 25–1675). The values of the basic parasitological indicators in the outdoor system proved be significantly ($P < 0.0016$) higher than in the remaining stables. The differences between the three breeding systems of horses compared were also found to be related to the phenology.

DE: strongylid nematodes, horses, breeding system, faecal analysis

SO: Zesz. Nauk. UP Wroc., Biol. Hod. Zwierz., 2010, LX, 577, 181–194.

TI: EFFECT OF BOAR BREED ON PIGLETS REARING PERFORMANCE AND DETERMINING THE RELATION BETWEEN THE LENGTH OF USING SOWS AND NUMBER OF LIVE AND STILL BIRTHS OF PIGLETS

AU: Jankowska A.

AD: Institute of Animal Breeding, Wrocław University of Environmental and Life Science

LA: Polish

AB: The research was conducted on piglets born from 120 wbp and pbz sows, whose growingpace was examined from their birth until the day of separation from the sows (day 1 to 28 of their life). The subject of the research was to compare certain factors of breeding the piglets that came from boars of two crossed breeds, namely Duroc x Pietrain and Hampshire x Pietrain.

The heaviest piglets at birth originated from wbp sows and dxp boars, indicating the average body weight of 1,64 kg, daily weight increases of 236 g, and the mass of 8,26 kg on a day of moving away.

The piglets of pbz sows and hxp boars were the lightest at birth, indicating 1,46 kg on average, daily increases of 208 g, and the mass of 7,28 kg on a day of moving away.

The highest daily increases in a period between day 1 and day 28 were noted by the piglets from group I and after wbp sows and dxp boars – 236 g on average.

Neither for wpb, nor for pbz sows any correlation between the length of using sows and the number of live / still births was identified.

DE: boars, sows, piglets, rearing of piglets

SO: Zesz. Nauk. UP Wroc., Biol. Hod. Zwierz., 2010, LX, 577, 195–204.

TI: THE FACTORS EFFECTING ON SECONDARY FERMENTATION IN SILAGES AND EFFECT OF THE AEROBICALLY UNSTABLE SILAGES ON THE RISK OF DIFFERENT METABOLIC DISEASE FREQUENCY OF DAIRY COWS 1

AU: Szyszkowska A., Krzywicki S., Sobczyk I>

AD: Department of Animal Nutrition and Feed Quality, Wrocław University of Environmental and Life Science

LA: Polish

AB: In present paper the effect of different factors influence the secondary fermentation in silages were described. There the soluble carbohydrate residues, plant species, dry matter content, oxygen availability, environmental temperature, microbial factors and silage additives were considered. Moreover the effects of feeding unstable on metabolic disorders were also presented.

DE: silages, secondary fermentation, aerobic stability – aerostability

SO: Zesz. Nauk. UP Wroc., Biol. Hod. Zwierz., 2010, LX, 577, 205–216.

TI: CHARACTERISTIC OF HORSES KEPT IN AGRICULTURAL FARMS IN SOWIE MOUNTAINS

AU: Walkowicz E., Jodkowska E., Rajca M.

AD: Institute of Animal Breeding, Wrocław University of Environmental and Life Sciences

LA: Polish

AB: The aim of this research was to characterize horses kept in small mountainous agricultural farms as well as indication of a possibility to improve their profitability for better prosperity of the farms. The research included 124 horses in private farms in mountainous regions. Basing on the questionnaires which were carried out, the following information was collected about each horse: sex and age, breed or origin, breeding potential, height at withers, colour, temperament, usage, origin and decision about the purchase. Indicated was a possibility of increasing profitability of horse keeping and breeding in small mountain farms.

DE: horses, agricultural farms, mountains

SO: Zesz. Nauk. UP Wroc., Biol. Hod. Zwierz., 2010, LX, 577, 217–226.

OTHERS

TI: THE INTEGRATION IN AN AGRICULTURE ON THE BASIS THE COOPERATION OF PRODUCERS' GROUPS AND MEAT PLANTS

AU: Knecht D>, Boruta O.

AD: Institute of Animal Breeding, Wrocław University of Environmental and Life Sciences

AB: Producers' group, which work successfully in EU, are alternative and chance to develop flock production in Poland. Farmers acting in the mentioned group decreased the production costs through discount to purchase the production means and higher price offered by Meat Factories. Strengthening relations with production and trade companies in the meat market is an opportunity of improving the market position of the group. The meat companies should enhance the producer groups to cooperate, i.e. they should actively improve their raw material basis.

DE: producers' group, flock, production costs

SO: Zesz. Nauk. UP Wroc., Biol. Hod. Zwierz., 2010, LX, 577, 227–234.