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C O N T E N T S

<i>Baskin L.M.</i> Populations of wild and feral reindeer of Siberia and Far East.....	3
<i>Volodin I.A., Volodina E. V., Filatova O.A.</i> The nonlinear phenomena promote high structural variability of whines in the domestic dog <i>Canis familiaris</i> (Carnivora, Canidae).....	11
<i>Poltarukha O.P.</i> Deep-sea Barnacles (Cirripedia, Thoracica) collected by MAR-ECO expedition on North Atlantic.....	18
<i>Koroleva N.E., Pereverzev V.N.</i> Zonal tundra vegetation and soil types in Murmansk Region.....	23
<i>Miliokhin D.I., Prokhorov V.P.</i> Species of genus <i>Hymenoscyphus</i> S.F. Gray at territory of Moscow city and Moscow district.....	31
<i>Martinenko V.B., Shirokikh P.S., Sultangareeva L.A., Mirkin B.M.</i> The input of the ecotoneous effect to phytodiversity of the South Ural broad leaved forests.....	37
<i>Shidakov I.I., Onipchenko V.G.</i> Comparative analysis of alpine plant leaf traits in the Teberda Reserve.....	42
<i>Parakhina E.A., Kiseleva L.L.</i> The present-day state on the dendroflora in Orel Region nobility estates.....	51

Scientific communications

<i>Nikitsky N.B.</i> New taxa of the hairy fungus beetles and false darkling beetles (Coleoptera, Mycetophagidae, Melandryidae).....	58
<i>Akenteva N.A.</i> The sensory organs of antennae and mouthparts larvae <i>Rhagium inquisitor</i> (L.) (Insecta: Coleoptera: Cerambycidae).....	62
<i>Fedorova S. G.</i> The lise (Anoplura) of Bishkek.....	68
<i>Vinogradova T.N.</i> Notes of finding of <i>Epipogium aphyllum</i> (F.W. Schmidt) Sw. (<i>Orchidaceae</i>) underground Stages near White sea Biostation station the Moscow State University.....	71
<i>Remizowa M. V.</i> A new variety of <i>Isidrogavia schomburgkiana</i> (Oliver) Cruden (<i>Tofieldiaceae</i>) from Venezuela.....	73
<i>Maslova E. V.</i> Polymorphism design of corolla of <i>Stachys palustris</i> L. (<i>Lamiaceae</i>) and it value with the use of molecular markers.....	75

Jubilee

Jubilee Nikolay Borisovich Nikitsky.....	80
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POPULATIONS OF WILD AND FERAL REINDEER OF SIBERIA AND FAR EAST

L.M. Baskin

Summary

In Russia, an idea of continual distribution of reindeer predominates. In other countries, the population approach is only acknowledged. Each population is considered strongly devoted to own calving grounds. In addition, the populations permanently use the same summer grounds. However, the distribution in winter time depends on carrying capacity of pastures and availability of food. In the paper the populations of wild and feral reindeer in Siberia and Far East are described using as a key features locations of their calving grounds, and in addition the reindeer' distribution during other pasture seasons. The populations' localities, numbers and, «Иида of home ranges and peculiarities of occupation of plant vegetation zones are done.

THE NONLINEAR PHENOMENA PROMOTE HIGH STRUCTURAL VARIABILITY OF WHINES IN THE DOMESTIC DOG *CANIS FAMILIARIS* (CARNIVORA, CANIDAE)

LA. Volodin, E.V. Volodina, O.A. Filatova

Summary

We analyzed quantitatively the occurrence of nonlinear vocal phenomena in whines of 9 domestic dogs of different breeds. The call recordings were made with participation of the dogs' owners, designing a frustration-evoking situation in their dogs. The dogs produced whines in response to impossibility to realize a desired action. The whines could consist two fundamental frequencies — the low (fO) and the high (gO), occurring both singly as separate vocalizations and together within a call. The low fundamental frequency, varying from 0,4 to 1,4 kHz among individuals, could be free of nonlinear phenomena or consisted deterministic chaos, subharmonics or frequency jumps within the low fundamental frequency. The high fundamental frequency, varying from 3,1 to 11 kHz among individuals, could also be free of nonlinear phenomena, or consisted sidebands. When both fO and gO occurred within a call simultaneously, it resulted in biphonation, and when they occurred one after another — in frequency jump from gO to fO. We showed, that nonlinear phenomena did occur significantly more often within the fO than within the gO, and significantly more rarely in calls consisting both fO and gO, than in calls with any of these frequencies produced singly. The occurrence of different nonlinear phenomena showed high interindividual variability. We discuss mechanisms for production of each of the components in the domestic dog. We have proposed, that nonlinear phenomena may function as a mechanism, supporting the high unpredictable variability of a call structure, that can be used by domestic dogs in order to attract attention of owners in a situation when a dog can't cope with a frustration evoking problem.

DEEP-SEA BARNACLES (CIRRIPEDIA, THORACICA) COLLECTED BY MAR-ECO EXPEDITION IN NORTH ATLANTIC

O.P. Poltarukha

Summary

The collections of the deep-sea barnacles (Cirripedia Thoracica) taken in the North Atlantic in June 2004 by MAR-ECO expedition were studied. At depths of 1652,93—3509,3 m the following Cirripedia species were found in 6 samples: *Neoscalpellum debile* (Aurivillius, 1898), *Amigdoscalpellum rigidum* (Aurivillius, 1898), *Catherinum recurvitergum* (Gruvel, 1902), *Trianguloscalpellum regium* (Wyville-Thomson, 1873), *Poecilasma kaempferi* Darwin, 1852. All these species have been known in the North Atlantic before. The data obtained extend the previously known areas of distribution of species such as *Neoscalpellum debile* and *Catherinum recurvitergum*.

ZONAL TUNDRA VEGETATION AND SOIL TYPES IN MURMANSK REGION

N.E. Koroleva, V.N. Pereverzev

Summary

Main associations and soil types of tundra zone of Murmansk Region and its inter-relations are observed. Zonal soil types in cold humid areas (like Murmansk Region) are formed on bedrocks of various origins and are

mainly sandy and gravelly, and well-drained. In landscape position with free internal drainage snow-distribution gradient is presented by following vegetation types: zonal vegetation belongs to ass. *Arctostaphylo (alpinae)*—*Empetretum hermaphroditi* and ass. *Empetro—Betuletum nanae*. Early snow-bed communities belong to ass. *Phyllodoco—Vaccinietum myrtilli*, late snow-bed communities — to ass. *Veratro lobeliani—Salicetum herbaceae*. Snow-free habitats are occupied by ass. *Loiseleurio—Diapensietum* and ass. *Arctostaphylo (alpinae)*—*Empetretum hermaphroditi* subass. *inops*. Prevailing soil types develop under free internal drainage are AI-Fe-humus podzols and podburs. Podburs are formed owing to local conditions, and are considered to be azonal soil type, and podzols. are characteristic not only for tundra zone, but also for forest-tundra and northern taiga.

SPECIES OF GENUS *HYMENOSCYPHUS* S.F. GRAY AT TERRITORY OF MOSCOW CITY AND MOSCOW DISTRICT

D.I. Miliokhin, V.P. Prokhorov

Summary

Existent keys for genus *Hymenoscyphus* present some difficulties in species identification because they are based on certain variable characters. The new key for identification of 30 species widespread at temperate region was developed using more stable characters

THE INPUT of THE ECOTONEOUS EFFECT TO PHYTODIVERSITY OF THE SOUTH URAL BROAD LEAVED FORESTS

V.B. Martinenko, P.S. Shirokikh, L.A. Sultangareeva, B.M. Mirkin

Summary

The ecotoneous effect takes place in the South Ural forests due overlap of the floristical combinations of the classes *Quercu-Fagetea*, *Brachypodio-Betuletea*, *Festuco-Brometea*, *Trifolio-Geranetea* and *Vaccinio-Piceetea*. This effect increases species richness of the forest communities. This regularity is illustrated by example of three alliances. The two from them are influenced by ecotoneus effects (*Lathyro-Quercion* and *Aconito-Tilion*) and one (*Quercu-Tilion*) is without this effect.

COMPARATIVE ANALYSIS OF ALPINE PLANT LEAF TRAITS IN THE TEBERDA RESERVE

I.I. Shidakov, V.G. Onipchenko

Summary

Leaf thickness, mass, water content, area and specific leaf area (SLA) were studied for 116 alpine plant species in 4 plant communities in the Northwest Caucasus. *Sedum tenellum* had the smallest leaves (mean area 0,03 cm², mean dry mass 0,3 mg), *Pulsatilla aurea* had the largest leaves (72 cm² and 443 mg correspondingly). *Trifolium spadiceum* and *Draba hispida* had the highest SLA values (490 and 437 cm²/g, correspondingly). Larger leaves were observed for more productive *Geranium—Hedysarum* meadow, smaller — for snowbed plants. Mean SLA increased from dry snowfree to snowbed communities. SLA was positively correlated with water content and leaf area.

THE PRESENT-DAY STATE ON THE DENDROFLORA IN OREL REGION NOBILITY ESTATES

E.A. Parakhina, L.L. Kiseleva

Summary

It's told about stocktaking results of 30 parks in Orel region nobility estates and about some of them research history. Brief historical information is adduced about the parks creation and their former owners. The tree plants list of all present day parks is given. The article described tree and shrubbery spreading dynamics in each park.

**NEW TAXA OF THE HAIRY FUNGUS BEETLES
AND FALSE DARKLING BEETLES (COLEOPTERA,
MYCETOPHAGIDAE, MELANDRYIDAE)**

N.B. Nikitsky

Summary

In the family Melandryidae are given the description of new subgenus of the genus *Mycetophagus* Fabricius, 1792 — *Micromycetophagus* subgen. nov., type species — *Tritoma undulata* Reitter, 1889 = *Mycetophagus undulatus* (Reitter, 1889). Name *Mycetophagus undulatus* (Reitter, 1889) is not valid, therefore this is junior homonym of *Mycetophagus undulatus* (Marsham, 1802) = *Mycetophagus piceus* (Fabricius, 1777). Therefore this name is rename as *Mycetophagus reitteri* Nikitsky, nom. nov. In the family Melandryidae described as new tribes: Anisoxiellini Nikitsky, trib. nov. (type genus — *Anisoxiella* Nikitsky, 1989) and Zilorini Nikitsky, trib. nov. (type genus — *Zilora* Mulsant, 1856).

**THE SENSORY ORGANS OF ANTENNAE
AND MOUTHPARTS LARVAE *RHAGIUM INQUISITOR* (L.)
(INSECTA: COLEOPTERA: CERAMBYCIDAE)**

N.A. Akenteva

Summary

At the studying of larvae beetle *Rhagium inquisitor* on under the scanning electronic microscope was revealed, that on the antenna is represented 3 long and 4 short trichoid sensillae, 3 basiconic sensillae and antennal cones. On a surface of the antennal sensitive cones be found out perforation, settling down by surrounding rings near to distal termination and the basis of a cone. Possibly the antennal sensory cones accomplish olfactory function. Maxillar palps consist of three parts: on distal — was revealed styloconic and basiconic sensillae. On the lateral sides of distal palp's part settles down finger-shaped sensilla. On the termination of labial palps, on the sensory platform, was revealed 13 sensillae: 5 basiconic, 6 styloconic usual, 2 styloconic with pillow-shaped cuticular the platen. The number and arrangement sensillae on the antennae and mouthparts larvae *Rh. inquisitor* during postembryonic development does not changen

THE LICE (ANOPLURA) OF BISHKEK

S.G. Fedorova

Summary

The results of parasitology investigation of 18 species of mammals in Bishkek is given. 7 species of lice are recorded on 6 species of hosts, most of them are rodents.

The abundance and species diversity of lice are correlate with the general process of human activity and transformation of natural landscapes.

**NOTES OF FINDING OF *EPIPOGIUM APHYLLUM* (F.W. SCHMIDT) SW
(*ORCHIDACEAE*) UNDERGRAUND STAGES NEAR WHITE SEA
BIOLOGICAL STATION OF THE MOSCOW STATE UNIVERSITY**

T.N. Vinogradova

Summary

During the routine investigations of underground orchid seedlings near the White Sea Biological Station of the Moscow State University (northwestern Russia) had been found two juvenile underground. speciments of rare orchid *Epipogium aphyllum* (F.W. Schmidt) Sw. We compared this seedlings with additional material from the big *E. aphyllum* population on the Kem-Luda Islands (White Sea). Flowering plants of *E. aphyllum* steel not found in the region of the WSBS.

**A NEW VARIETY OF *ISIDROGALVIA SCHOMBURGKIANA* (OLIVER)
CRUDEN (*TOFIELDIACEAE*) FROM VENEZUELA**

M. V. Remizowa

Summary

Isidrogalvia schomburgkiana var. *patula* Remizowa is described from southern Venezuela. The variety differs from typical *Isidrogalvia schomburgkiana* in inflorescence shape. In newly described variety pedicels are long and curved (pendulous). This variety probably appeared as a result of saltation

**POLYMORPHISM DESIGN OF COROLLA OF *STACHYS PALUSTRIS* L
(*LAMIACEAE*) AND IT VALUE WITH THE USE OF MOLECULAR MARKERS**

E.V. Maslova

Sumnaiy

Diversity designs of corollas of *Stachys palustris* was studied in the 28 natural populations from the Belgorod and Moscow regions of Russia and Kharkov and Lugansk regions of Ukraine. Two basic variation design of corolla were isolated and described. Analysis of polymorphism by using ISSR markers showed high degree stability of the design of corolla and possibility it to use for difference of the individual clones in populations. Molecular analysis failed to show trend the species from the different of population distribution relative to their variation of design also as the divergence between segetal and waterlogged plants in the populations