

Biological series
Volume 110. Part 3
2005

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Jubilee

Jubilee of the Vladimir botanist. To the 60th anniversary of, Petr Alexeevich Seregin

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Флористические заметки

Юбилей владимирского ботаника. К 60-летию со дня рождения Петра Алексеевича Серегина

STUDY OF THE MOTOR ACTIVITY OF THE TADPOLES OF BROWN FROG (*RANA TEMPORARIA*) AND COMMON TODD (*BUFO BUFO*)

*Surova, T. Yu. Dunaeva, A.I. Evseev
,A.P.Feofanova, N.V. Gromova, A.V. Rusanova*

Summary

We studied the behavior of tadpoles of *Rana temporaria* and *Bufo bufo* in aggregations in the laboratory and in two natural ponds. In the native pond we revealed different types of aggregations: alimentary, thermal and mixed. After transferring marked (by neutral red) individuals of *Bufo bufo* to another aggregation, the last one was disintegrated and strange tadpoles migrated direct to their native aggregation, covering up to 12 m per hour. Ehile *Rana temporaria* aggregations were intact and strange individuals spread out in various directions. Laboratory experiments have shown, that single tadpoles *B. bufo* had maximum activity, in group of 5 individuals it's activity was lower, and in the group of 30 individuals it was the minimum. For *R. temporaria* tadpoles the activity had the inverse dependence: motor activity was maximum in the group of 30 individuals and the minimum — without any neighbors. The presence of predators (*Dytiscus marginatus* larvae) decreased tadpole activity of both species dramatically. If predators were ex posed to tadpole aggregations in nature pond tadpoles swam off and stayed motionless.

COMPARISON OF BROWN BEAR (*URSUS ARCTOS*) MARKED BEHAVIOR ON SITES OF ISLAND AND CONTINENTAL POPULATIONS IN THE SOUTH OF THE FAR EAST OF RUSSIA

A.P.Berzan

Summary

Comparison of parameters of marked activity of representatives of the brown bear (*Ursus arctos*) two populations is carried out: an arrangement of the markers, species structure and average diameter of marked tree's trunks. The island population is submitted by island Kunashir, the continental population is submitted by the southeast slopes of the Sikhote-Alin (Primorski region). The basic distinctions in an arrangement of the markers are revealed. The species structure and average diameter of marked trees of the compared populations are differing a little bit.

On the average on markers of the island population is observed 1,5 windows of marks, on markers of the island population — 2,1 windows. Average extent window of markers makes 33 sm. The average arithmetic of the top border of scratching stains on the markers of the island population is essentially exceeding the appropriate parameters of the continental population. 52% markers of the island population and 65% markers of the continental population have a marked stain. Extremely smell markers makes 36% from all quantity of markers. The greatest distinction of compared populations is observed in a sphere of track marking.

THE BARK BEETLES FROM THE TRIBUS XYLEBORINI, CRYPHALINI AND CORTHYLINI (COLEOPTERA: SCOLYTIDAE, SCOLYTINAE) OF WESTERN CAUCASUS

(with notes on some species from other tribus of the family)

M.Yu. Mandlshtam, N.B. Nikitsky, A.R. Bibin

Summary

Authors have analyzed rich own material of bark-beetles (Coleoptera: Scolytidae) collected in Krasnodar Province of Russia and in Republic of Adygeya as well as collections of Scolytids from these territories deposited in the Zoological Museum of Moscow State University and in the Caucasian Biosphere State Nature Reserve. *Trypophloeus tremulae* Stark is considered to be the only species of its genus to be distributed in the Krasnodar Province of Russia and in the whole Caucasus; it was never previously indicated for the Caucasus. Authors have summarized scattered data on the bark-beetle fauna of the Caucasian Nature Biosphere Reserve — the most important protected area in the Western Caucasus. New data about recently introduced to Caucasus *Xylosandrus germanus* (Blandf.) distribution range expansion are provided. New host-plants for several polyphagous bark-beetle species are indicated. New distribution data for some bark-beetle species in Russia are provided.

**DIAGNOSTIC CHARACTERISTICS OF ALL NAUPLIAR STAGES
OF BARNACLES (CIRRIPEDIA THORACICA) IN PLANKTON OF THE COASTAL ZONE
IN THE NORTHERN SEAS OF RUSSIA**

O.P. Poltarukha

Summary

A brief description of the coastal barnacle (Cirripedia, Thoracica) fauna of the Russian part of Arctic Ocean is given. Based on the comparative analysis of morphology of the barnacle naupliar stages, a key for identification of all the naupliar stages of the coastal water barnacles of the Russian part of Arctic Ocean is presented.

**ANTITUDINAL DISTRIBUTION OF PLANT SPECIES
AND THREE-DIMENSIONAL SPACE OF AREA**

V.B. Cuvaev

Summary

The latitudinal changes of altitudinal distribution of species have been explored on 2 meridional megaprofile — urals (from the South to the Polar Ural) and yenisean (from the West Sayan to the ridge Byrranga, Taimyr). According to these changes meridional section of three-dimensional space of area are distributed in three altitudinal-latitudinal groups: 1 — normal, in the form of parallelogram rising to the equator; 2 — have the same form of parallelogram but with the south and the north angles near timberline; 3 — the section descending on the south and the north of area to the bottom of river's valleys. The changes with a longitude have been being revealed on longitudinal megaprofile through subarctic mountains of Eurasia from the northern Norway to the eastern Kamchatka. Seven altitudinal-longitudinal groups have been established from I — transcontinental to VII — pacific. The results of the research can be used for revelation of regions rise and formation of taxons and solution of other problems of plant geography.

**MORPHOLOGICAL AND ECOLOGICAL REGULARITIES OF
SOMATIC EVOLUTION IN THE FAMILY *RANUNCULACEAE* JUSS.**

R.P. Barykina

Summary

New and original data on morphology, anatomy, ontogeny, morphogenesis, vegetative propagation, and ecology of terrestrial and aquatic representatives of the family *Ranunculaceae* are presented. New morphological and ecological regularities as well as general trends, modes, and patterns of morphological evolution in the family are revealed. The family *Ranunculaceae* is regarded to be a taxon, which exhibits almost all main trends of somatic evolution in herbaceous angiosperms. Oligoxylic vascular system is considered to be a key factor responsible for structural diversity and high adaptive potential of *Ranunculaceae*.

**ADDITIONS TO THE FAUNA OF THE AQUATIC ADEPHAGA
BEETLES (COLEOPTERA) OF THE VOLGA REGION**

P.N. Petrov, L.V. Egorov

Summary

A list of six aquatic Adepfaga beetles (Coleoptera: Haliplidae, Dytiscidae, Gyrinidae) recorded in the Chuvash Republic and the Astrakhan Oblast, Volga region, is given. *Haliplus astrakhanus* (Haliplidae) is found for the first time since its description in 1991 from a single 19th-century specimen; *Hygrotus caspius* (Dytiscidae) is for the first time reported from central European Russia (Chuvashiya and vicinities of Moscow); *Haliplus sibiricus* (Haliplidae) and *Gyrinus aeratus* (Gyrinidae) are new to Chuvashiya.

**NEW SPECIES OF THE GENUS ARGYRA
(DIPTERA, DOLICHOPODIDAE) FROM NORTH CAUCASUS**

O.P. Negrobov, O. V. Selivanova

Summary

A new species of the genus *Argyra* is described from North Caucasus. This species — *Argyra submontana* Negrobov et Selivanova, sp. n. — is close to *Argyra atriceps* Loew, but differ from the last by morphology of hypopygium, long bristle on 1st hind tarsus segments and yellow legs.

**TARAXACUM OFFICINALE AS AN INDICATOR
OF DISTURBANCE IN MEADOW**

I.M. Ermakova, N.S. Sugorkina

Summary

Dandelion mark scales are offered for estimation of the water-meadow weediness. The possibility of the scale usage is given in order to estimate the vegetation state. The highest value of weediness indicates that the coenosis has non-dense vegetation cover and much open spaces in it. It shows necessity to decrease the press. The visual estimation by the scales is the convenient method of meadow state monitoring.

**PANICUM HILLMANII CHASE –
THE NEW ADVENTIVE SPECIES FOR RUSSIA**

Yu.E. Alexeev

Summary

As an autochthonous species *Panicum hillmanii* Chase is spread in eastern parts of North America. The presence of *P. hillmanii* in Russia point to the conclusion that the spreading of this species is influenced by anthropochorous factors. A morphological comparison has been made between *P. hillmanii* Chase and *P. capillare* L.

Sokoloff D.D. A new combination in the genus *Coronilla* (Leguminosae, Loteae)

Floristic notes

Sukhorukov A.P. On new and some critical species of the flora of Tambov province.

Lysenko T.M., Mitroshenkova A.Ye. New records of rare plant species from Samara province.

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Kulikov P.V. New data on the flora of Siberia.

Skvortsov V.E. New floristic records from Khakas republic.

Skvortsov V.E. New and rare vascular plant species for the flora of the Abakan range. III.