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ABSTRACTS

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FOUR NEW SPECIES OF *BILABRELLA* (ORCHIDACEAE, HABENARIINAE) FROM AFRICA

MARTA KRAS & DARIUSZ L. SZLACHETKO

Abstract. Four new species of the genus *Bilabrella* Lindl. (Orchidaceae, Habenariinae) from Africa are described and illustrated, and their taxonomy is briefly discussed.

Key words: Orchidaceae, *Habenaria*, *Bilabrella*, new species, systematic

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PLATYCORYNE LISOWSKIANA (ORCHIDACEAE, ORCHIDOIDEAE), A NEW SPECIES FROM THE CENTRAL AFRICAN REPUBLIC

DARIUSZ L. SZLACHETKO & MARTA KRAS

Abstract. A new species of the genus *Platycoryne* Rchb.f. from the Central African Republic is described, illustrated, and compared with *P. megalorrhyncha* Summerh.

Key words: Orchidaceae, *Platycoryne*, new species, Africa

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BIOGEOGRAPHY AND DIVERSITY OF THE TUBIFLORAE IN EGYPT

NAHED EL-HUSSEINI, MONIER M. ABD EL-GHANI & SALAH I. EL-NAGGAR

Abstract. The species distribution and biogeography of the Egyptian Tubiflorae were examined in detail. We found 284 species of vascular plants belonging to 96 genera and 12 families. The most species-rich families were Scrophulariaceae, Boraginaceae, Labitae, Convolvulaceae and Solanaceae, constituting more than 85% of total species in the order. The generic spectrum was dominated by a suite of species-rich genera (*Convolvulus*, *Heliotropium*, *Veronica*, *Solanum*, *Salvia*, *Cuscuta*, *Echium*, *Ipomoea*, *Orobanchae*). Therophytes were the most dominant life forms among the families, followed by chamaephytes and hemicryptophytes. Boraginaceae and Scrophulariaceae had the highest share of annuals. Remarkable distribution patterns of the life forms in the seven studied biogeographic zones were noted. Trees were dominant in the Mediterranean zone, while shrubs, perennial herbs and therophytes were dominant in the Sinai. Altogether 8 endemic species and 14 near-endemics were included in the Tubiflorae of Egypt, mostly from southern Sinai. We found that Labiatae and Scrophulariaceae were the families with a higher concentration of endemics. Notably, *Teucrium* was among the genera of Mediterranean Africa with the highest endemism. Gamma diversity varied from 171 in the Sinai Peninsula to 43 and 39 in the oases of the Western Desert and along the Red Sea, respectively. Interestingly, the highest significant values of similarity and species turnover (beta diversity) were found between the oases and the Nile lands. We note the combined effect of both temperature and precipitation on the species richness of Tubiflorae in the seven biogeographic zones. Almost half of the species showed a certain degree of consistency, that is, with narrow geographic expansion. On the basis of UPGMA clustering and PCoA analysis, 4 floristic groups were recognized, each including one or more biogeographic zones. The occurrence of the species of Tubiflorae in adjacent regional floras and their phytochorological affinities are discussed.

Key words: geographical distribution, gamma diversity, Egypt, flora, endemics

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PHYTOSOCIOLOGICAL STUDY OF *TREMA ORIENTALIS* AND *VERNONIA AURICULIFERA* HIGHLAND COMMUNITY IN SOUTHWESTERN UGANDA (EAST AFRICA)

MBOKUYO MOSANGO & JACKSON MWANJALOLO MAJALIWA

Abstract. A phytosociological study of a community dominated by *Trema orientalis* and *Vernonia auriculifera* in Kibale National Park, southwestern Uganda, was carried out in 2002. This plant community was found growing in an area of abandoned farmland. In total, 131 species were recorded; most of them are phanerophytes, zoochorous and widely distributed in tropical Africa. The community is characterized by two main strata: the upper one, 4–10 m high, is dominated by *Trema orientalis* and *Vernonia auriculifera* and other shrub species; the lower one, 1–1.5 m high, comprises mostly herbaceous species and seedlings and saplings of secondary and mature forest tree species. The *Trema orientalis* and *Vernonia auriculifera* community is described as a new early forest succession association, *Tremo-Vernonietum auriculiferae* ass. nova. It is ascribed to the alliance of *Lobelion gibberoae* Lebrun & Gilbert 1954, which includes forest fallow plant communities occurring in highlands.

Key words: *Trema orientalis* and *Vernonia auriculifera* community, phytosociology, Kibale National Park, Uganda

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MALLOMONAS STRIATA VAR. SERRATA AND SYNURA PETERSENII F. KUFFERATHII, TWO SILICA-SCALED CHRYSOPHYTES NEW TO CAMEROON

JOLANTA PIĄTEK & DOMINIQUE C. MOSSEBO

Abstract. *Mallomonas striata* Asmund var. *serrata* K. Harris & D. E. Bradley and *Synura petersenii* Korshikov f. *kufferathii* J. B. Petersen & J. B. Hansen are reported from a marshy swamp by a stream in the Guineo-Congolian tropical rainforest in eastern Cameroon. They are described and illustrated with LM and SEM micrographs. Both taxa are reported for the first time from Cameroon.

Key words: Synurophyceae, *Mallomonas*, *Synura*, Guineo-Congolian tropical rainforest, Cameroon

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CONTRIBUTION TO THE KNOWLEDGE OF THE LICHEN BIOTA OF BOLIVIA. 2

ADAM FLAKUS

Abstract. The paper presents new records of 57 lichenized fungi from Bolivia collected recently from lowland and montane rain forests and from open high Andean habitats. Of the taxa, 23 species are reported for the first time from the country: *Calicium salicinum* Pers., *Cladonia aleuropoda* Vain., *C. lepidophora* Ahti & Kashiw., *C. macilentoides* Ahti & Fleig, *Coccocarpia filiformis* Arv., *Coenogonium congense* C. W. Dodge, *C. luteocitrinum* Rivas Plata, Lücking & Umaña, *C. subdentatum* (Vězda & G. Thor) Rivas Plata, Lücking, Umaña & Chaves, *C. tuckermanii* Mont., *Cresponea melanocheloides* (Vain.) Egea & Torrente, *Dichosporidium nigrocinctum* (Ehrenb.) G. Thor, *Graphis chrysocarpa* (Raddi) Spreng., *Lobaria fendleri* (Tuck. ex Mont.) Lindau, *Lobariella crenulata* (Hook.f.) Yoshim., *Lopezaria versicolor* (Fée) Kalb & Hafellner, *Malcolmiella piperis* (Spreng.) Kalb & Lücking, *M. rhodopsis* (Tuck.) Kalb & Lücking, *Megalospora sulphurata* Meyen, *Ocellularia viridis* Hale, *Phaeographis haematites* (Fée) Müll. Arg., *Porina leptalea* (Durieu & Mont.) A. L. Sm., *Tremolecia atrata* (Ach.) Hertel and *Tylophoron crassiusculum* Tibell.

Key words: lichenized fungi, new records, biogeography, neotropics, Bolivia, South America

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ADDITIONS TO THE BIOTA OF LICHENS AND LICHENICOLOUS FUNGI OF POLAND, WITH A NOTE ON *LECANIA PRASINOIDES* IN EASTERN AND CENTRAL EUROPE

JURGA MOTIEJŪNAITĖ & KRYSZYNA CZYZEWSKA

Abstract. Data on twelve lichens and lichenicolous fungi rare or poorly known in Poland are presented. *Sclerophora coniophaea* is reported for the first time for the Polish lowlands and the second time for the country. The lichenicolous fungus *Niesslia cladonicola* is reported here for the first time for Poland. The distribution of *Lecania prasinoides* in Eastern and Central Europe is discussed, and the species is reported here for the first time for Ukraine.

Key words: lichenized Ascomycota, cladoniicolous and peltigericolous fungi, new records, Poland, Lithuania, Ukraine

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NEW RECORDS OF LICHENS AND LICHENICOLOUS FUNGI FROM THE POLISH TATRA MOUNTAINS

MICHAŁ WĘGRZYN

Abstract. Of the seven interesting lichens and lichenicolous fungi reported, *Rhizocarpon cinereovirens* (Müll. Arg.) Vain., *Rinodina calcarea* (Arnold) Arnold and *Muellerella ventosicola* (Mudd) D. Hawksw. are new to the whole Tatra range, and *Catillaria contristans* (Nyl.) Zahlbr., *Rinodina laevigata*, *Endococcus propinquus* (Körb.) D. Hawksw and *E. rugulosus* Nyl. are new to the Polish Tatras. Brief taxonomic, distributional and ecological notes are provided for each of the taxa.

Key words: lichenized fungi, lichenicolous fungi, subalpine belt, Tatra Mts, Western Carpathians, Poland

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NOVELTIES OF PROTOMYCETACEAE IN THE TATRA MTS

KAMILA BACIGÁLOVÁ, WIESŁAW MUŁENKO & AGATA WOLCZAŃSKA

Abstract. Two interesting species of *Protomyces* Unger collected recently in the Tatra Mts are described, illustrated in detail and compared with similar taxa. *Protomyces crepidis-paludosae* Büren on *Crepis paludosa* (L.) Moench is a new species for Slovakia. *Protomyces macrosporus* Unger on *Laserpitium latifolium* L. is a new fungus/host combination in the Carpathians. *Protomyces macrosporus* Unger on *Carum carvi* L. is reported from the first locality in the Slovak part of the Tatra Mts.

Key words: microfungi, biology, ecology, Carpathian Mts, Poland, Slovakia

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INLAND DELTA PLANT COMMUNITY STRUCTURE AND SOIL MICROSCOPIC FUNGI ON KOPAC ISLAND (SLOVAKIA) AFTER DAMMING OF DANUBE RIVER

ALEXANDRA ŠIMONVIČOVÁ, RICHARD MIČUDA & DOMENICO PANGALLO

Abstract. Old gravel-sandy sediments of the head of the inland delta of the Danube River represent a specific soil and plant ecosystem. There, on Kopac Island, seven areas were studied and the phytocoenoses and soil microscopic fungi communities compared. The areas differ in elevation, level of groundwater, depth of gravel-sandy material, texture of the soil profile, and vegetation communities. Moisture as the primary ecological factor apparently very strongly affected the soil and plant communities but not the microscopic fungi community structure.

Key words: *Asparago-Crataegetum danubiale*, microscopic fungi, mycocoenosis, alluvial soils, groundwater

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NODULISPORIUM CECIDIOGENES – A MYCOPARASITE OF CONIOPHORA PUTEANA FOUND IN POLAND

MARCIN PIĄTEK & DARIUSZ KARASIŃSKI

Abstract. *Nodulisporium cecidiogenes* Jørg. Koch, a gall-forming mycoparasite of *Coniophora puteana* (Schumach.) P. Karst., is reported for the first time from Poland. This species was hitherto known only from Belgium, Denmark, England, and Wales – thus the three localities in Poland extend its range to Central Europe. The macro- and micromorphological characters of Polish specimens of *Nodulisporium cecidiogenes* are described and illustrated. The distribution of the species in Poland is mapped.

Key words: biodiversity, *Coniophora*, mycoparasite, *Nodulisporium*, Poland

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Botanical Notes

VALIDATION OF THE GENUS *SIPEMANNIA* (MUCORACEAE) AND ITS FOUR SPECIES

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CALICIUM PINASTRI (LICHENIZED ASCOMYCOTA), A LICHEN SPECIES NEW TO POLAND

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