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TAXONOMIC REVISION OF *HIERACIUM* SECT. *CERNUA* (ASTERACEAE) IN THE CARPATHIANS, SUDETES AND ALPS

ZBIGNIEW SZELĄG

Abstract. *Hieracium* sect. *Cernua* R. Uechtr. comprises ca 40 taxa at the species level and ca 30 at the subspecies level. Most taxa occur in the Balkan Peninsula and the Southern Carpathians. This paper presents a taxonomic revision of the Carpathian, Sudetic and Alpine representatives of the section. The current 22 species, 7 subspecies and 13 varieties and forms are reduced to 16 species. A new species, *H. mirekii* Szelaĝ, is described from the Southern Carpathians, and two other taxa are raised to species rank, as *H. mitkae* Szelaĝ and *H. polyphyllobasis* (Nyár. & Zahn) Szelaĝ, giving a total of 19 species recognized in the study area. The taxonomic position of *H. zanogae* Pax remains unexplained. Seventeen names are typified. Ten names are considered as not validly published and 4 names as illegitimate. Altogether 52 names exist for the 19 species recognized in this paper. *Hieracium abietogenum* Szelaĝ, *H. borbasii* var. *ramiciferum* Nyár., *H. fagarasense* (Nyár. & Zahn) Nyár., *H. perfoliosum* Szelaĝ and *H. pisaturense* Nyár. are excluded from *H. sect. Cernua*. The treatment includes a key for determination, descriptions and illustrations, and distribution maps of the 18 species. Most species are narrow endemics restricted to certain geographic areas. Biogeographical relationships within the section are discussed: (1) the occurrence of *H. sect. Cernua* in the South-eastern Carpathians and Apuseni Mountains as well as in the Eastern Alps is presumably a relict originating from a diploid, sexual species with a wider primary range, (2) none of the South-eastern Carpathian species are known to also occur in the Western Carpathians, (3) *H. silesiacum* E. Krause is a common species in the Western Carpathians and the Eastern Sudetes, whereas *H. vierhapperi* (Zahn) Szelaĝ is a common species for the Alps and the Western Carpathians, (4) the significance of the ‘Waldkarpaten’ (Forest Carpathians) range is highlighted as a potential ecological barrier limiting migration of subalpine plant species between the South-eastern and the Western Carpathians, (5) the representatives of *H. sect. Cernua* were able to reach the Western Carpathians and the Sudetes via the Eastern Alps, and thus circumventing the South-eastern Carpathian path, regarded as the main migration route of the mountain flora from the Balkan Peninsula.

Key words: Asteraceae, distribution, endemics, *Hieracium* sect. *Cernua*, illustrations, migration routes, new species, nomenclature, synonymy, taxonomy, typification

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NEW OR LITTLE KNOWN EPIPHYLLOUS LIVERWORTS, XIII. *COLOLEJEUNEA ARFAKIANA* SP. NOV. FROM WEST IRIAN (NEW GUINEA)

TAMÁS PÓCS & JENS EGGERS

Abstract. A new epiphyllous liverwort species, *Cololejeunea arfakiana* Pócs & Eggers, is described from the Arfak Mountains on Vogelkop Peninsula in West Irian. The most striking character of the new species is the presence of numerous scattered, rust-brown ocelli in the leaves, combined with a ligular stylus usually 2 cells wide.

Key words: Arfak Mts, *Cololejeunea*, epiphylls, Irian Jahya, Lejeuneaceae, New Guinea, ocelli

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SPORISORIUM KENYANUM, A NEW SMUT FUNGUS WITH LONG TWISTED SORI ON *SETARIA PALLIDE-FUSCA* IN KENYA

MARCIN PIĄTEK

Abstract. A new smut fungus, *Sporisorium kenyanum* M. Piątek, is described and illustrated from infected plants of *Setaria pallide-fusca* (Schumach.) C. E. Hubb. collected in Kenya, Africa. The species is characterized by the following: long twisted sori produced on the distal parts of sterile shoots; the presence of spore balls consisting of small, finely verrucose-echinulate spores; and the absence of sterile cells. It is similar to *Sporisorium panici-leucophaei* (Henn.) M. Piepenbr. on various species of *Digitaria*, *Echinochloa*, *Oplismenopsis* and *Panicum* in Australia and North and South America. However, in this latter smut the spores are larger, somewhat more prominently echinulate, and somewhat more variable in shape and size than those of *S. kenyanum*.

Key words: *Sporisorium*, *Lundquistia*, Ustilaginaceae, Ustilaginomycetes, smut fungi, taxonomy, new species, Africa

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ENTYLOMA CREPIDIS-TECTORI AND UROCYSTIS DESCHAMPSIAE, TWO NEW SMUT FUNGI FROM EUROPE

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Abstract. Two new smut fungi (Ustilaginomycetes) are described and illustrated from Europe: *Entyloma crepidis-tectori* M. Piątek *sp. nov.*, causing leaf spots on *Crepis tectorum* L. in Denmark, and *Urocystis deschampsiae* M. Piątek *sp. nov.*, forming long striae between the veins of *Deschampsia caespitosa* (L.) P. Beauv. in Iceland. *E. crepidis-tectori* is the third *Entyloma* de Bary species known on *Crepis* L. (Asteraceae). The species is similar to *E. zacantha* Vánky infecting *Crepis zacantha* (L.) Loisel. in Greece, from which it differs by possessing larger, commonly irregular spores with a slightly thicker spore wall. *U. deschampsiae* is the first *Urocystis* Rabenh. ex Fuckel species on *Deschampsia* P. Beauv., but the eighth *Urocystis* infecting grasses belonging to the subtribe Aveninae (Poaceae). The new species differs from all of them by the number and frequency of spores per spore ball as well as by the sizes of the spore balls, spores and/or sterile cells.

Key words: *Entyloma*, *Urocystis*, Ustilaginomycetes, new species, Denmark, Iceland

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DOASSANSIOPSIS TOMASII, AN AQUATIC SMUT NEW TO UGANDA

MARCIN PIĄTEK

Abstract. *Doassansiopsis tomasii* Vánky, recently described as a new species from infected leaves of *Nymphaea nouchali* Burm.f. in Ethiopia, is reported from the second world locality in Uganda. In this country it was found in Lake Victoria on *Nymphaea* sp. 52 years earlier than the type specimen in Ethiopia. The sori and spore balls of *D. tomasii* are described and illustrated by line drawings, LM and SEM micrographs, and the global distribution of the smut fungus is presented on the map. In addition, an interesting case of accidental infection of *Nymphaea nouchali* by *Doassansiopsis nymphoides* Vánky in Zambia is briefly discussed.

Key words: *Doassansiopsis*, Doassansiopsidaceae, Urocystales, Uganda, Africa

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DIATOMS OF THE WYŻYNA KRAKOWSKO-CZĘSTOCHOWSKA UPLAND (S POLAND) – COSCINODISCOPHYCEAE (THALASSIOSIROPHYCIDAE)

AGATA ZOFIA WOJTAL & JANINA KWANDRANS

Abstract. The paper describes centric diatoms of the class Coscinodiscophyceae (Thalassiosirophycidae) identified in materials collected from springs and streams of the Wyżyna Krakowsko-Częstochowska upland in 1993–2005, supplemented by records from related literature. The presence of 20 species belonging to seven genera is confirmed. Among them, taxa new to the Polish diatom flora were observed, including *Thalassiosira duostra* Pienaar, *Skeletonema potamos* (Weber) Hasle and *Cyclotella delicatula* Hustedt, along with several taxa very rarely reported from Poland, such as *Thalassiosira guillardii* Hasle, *Cyclostephanos delicatus* (Genkal) Casper & Scheffler and *C. invisitatus* (Hohn & Hellermann) Theriot, Stoermer & Håkansson, and five species new for the studied area. LM and SEM micrographs document all the species recorded in the materials collected. Comments accompany most of the taxa, and dot maps of the distribution of some species are given.

Key words: Bacillariophyta, Centrales, taxonomy, ecology, springs, running waters, distribution

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SOME INTERESTING RECORDS OF LICHENIZED AND LICHENICOLOUS ASCOMYCOTA FROM SOUTH AMERICA

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Abstract. New records of six lichens and one lichenicolous fungus from South America are presented. *Lecanora leuckertiana* (Peru) and *Psilolechia clavulifera* (Bolivia) are recorded for the first time from South America. *Chrysothrix xanthina*, *Nectriopsis parmeliae* (on *Candelariella* sp. as a new host), *Psilolechia lucida* and *Trapeliopsis granulosa* are new to Bolivia, and *Piccolia ochrophora* to Argentina. *Chrysothrix* and *Psilolechia* are new genera to the lichen biota of Bolivia.

Key words: Argentina, biodiversity, biogeography, Bolivia, neotropics, Peru

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MYCENA TENUISPINOSA (FUNGI, AGARICALES), A SPECIES NEW TO POLAND

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Abstract. *Mycena tenuispinosa* J. Favre is reported for the first time from Poland. The species is described and illustrated, and the variability of its micromorphological characters is briefly discussed.

Key words: *Mycena tenuispinosa*, micromorphology, Western Carpathians, Poland, Europe

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PUCCINIA LASERPITII (UREDINALES), A NEW SPECIES FOR POLAND

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Abstract. *Puccinia laserpitii* Lindr. collected for the first time in Poland, is described, illustrated and compared with *P. pimpinellae* (Str.) Röhl. and *P. kreiselii* M. Scholler. Poland is the third country where this species was collected.

Key words: Uredinales, rust fungi, *Puccinia laserpitii*, distribution

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BOTANICAL NOTES

SCHISTOSTEGA PENNATA (BRYOPSIDA, SCHISTOSTEGACEAE) IN THE POLISH CARPATHIANS (POLAND)

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***DIPLOTOMMA SCHEIDEGGERIANUM* (LECANORALES, ASCOMYCOTA), A
LICHENICOLOUS LICHEN NEW TO POLAND**

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***CLADONIA BOREALIS* (CLADONIACEAE, LICHENIZED ASCOMYCOTA) IN THE POLISH
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**TWO SPECIES OF THE GENUS *CLADONIA* (CLADONIACEAE, LICHENIZED ASCOMYCOTA)
NEW TO THE POLISH TATRA MTS**

PIOTR OSYCZKA, MICHAŁ WĘGRZYN & ADAM FLAKUS

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