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## NEW TAXONOMICAL COMBINATIONS IN SOME GENERA OF *BACILLARIOPHYTA*

Seven new taxonomical combinations are proposed, four combinations – for the genus *Ulnaria* (Kütz.) Compère and three other ones – for *Neosynedra* Williams et Round, *Astartiella* Witkowki, Lange-Bertalot et Metzeltin and *Lemnicola* Round et Basson because of Ukrainian diatom flora arrangement.

*Keywords*: taxonomy, *Ulnaria*, *Neosynedra*, *Astartiella*, *Lemnicola*, *Bacillariophyta*.

The diatom taxa revision on electron microscopy basis has led to the description of numerous new genera, among which *Neosynedra* Williams et Round (Williams, Round, 1986), *Lemnicola* Round et Basson (Round, Basson, 1997), *Astartiella* Witkowki, Lange-Bertalot et Metzeltin (Moser et al., 1998). The new generic name *Ulnaria* (Kütz.) Compère for some widely distributed taxa of the former genus *Synedra* sensu lato was suggested as taxonomical correction (Compère, 2001). Due to diatom flora inventory on Ukraine territory some taxa need to be brought in agreement with this new nomenclature.

P. Compère (2001) has shown that the generic name *Ulnaria* has to be used for the group of species around *Synedra ulna* when this group is considered as a genus different from both *Fragilaria* (typified by *F. capucina*) and *Synedra* (typified by *S. baltica* Ehrenb., cf. R. Ross in Farr et al., 1979). The following taxa were recorded from different waters under given names.

### **ULNARIA amphirhynchus (Ehrenb.) Compère et Bukhtiyrova comb. nov.**

**BASIONYM:** *Synedra amphirhynchus* Ehrenb. 1841. Abh. Königl. Akad. Wiss. Berlin: 425, pl. III, fig. I.25. (1843).

**SYNONYMS:** *Synedra ulna* (Nitzsch) Ehrenb. var. *amphirhynchus* (Ehrenb.) Grunow.

*Ulnaria ulna* (Nitzsch) Compère var. *amphirhynchus* (Ehrenb.) Aboal.

**OCCURRENCE:** Epiphytic-epilithic in fresh waters.

**DISTRIBUTION IN UKRAINE:** lakes, ponds (Topachevskiy, Oksiyuk, 1960).

**GENERAL DISRIBUTION:** Cosmopolitan.

**ULNARIA capitata** (Ehrenb.) Compère var. *cuneata* (V.S. Poretzkiy) Compère et Bukhtiyrova comb. nov.

**BASIONYM:** *Synedra capitata* Ehrenb. var. *cuneata* V.S. Poretzkiy 1953. Diat. sbornik: 31-32, fig. 4.

**REMARK:** Taxon is validly published in 1953, however it presents in earlier publication: Diat. analiz. 1950, p. 48. The taxon was described from fossil material admitt-

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tedly of pliocen age. On the picture in V.S. Poretzkiy (1953) only the end of valve presents, no central area or other features because only valve fragments were found but certainly it belongs to *U. capitata* forms.

OCCURRENCE: Widely distributed in fresh waters.

DISTRIBUTION IN UKRAINE: ST: Dnipro estuary (Topachevskiy, Oksiyuk, 1960).

GENERAL DISRIBUTION: Europe.

**ULNARIA danica** (Kütz.) Compère et Bukhtyrova comb. nov.

BASIONYM: *Synedra danica* Kütz. 1844. Bacill.: 66, pl. 14, fig. 14.

SYNONYM: *Synedra ulna* (Nitzsch) Ehrenb. var. *danica* (Kütz.) Grunow in Van Heurck.

OCCURRENCE: Planktonic in fresh-brackish waters, alkaliphilic, β-mesosaprobious.

DISTRIBUTION IN UKRAINE: Widely distributed.

GENERAL DISRIBUTION: Cosmopolitan.

**ULNARIA ulna** (Nitzsch) Compère var. *subcontracta* (Oestrup) Compère comb. nov.

BASIONYM: *Synedra ulna* var. *subcontracta* Oestrup. In Héribaud (et coll.) 1920. Ann. Biol. Lacustre 10: 54, pl. VII, fig. 46.

SYNONYMS: *Synedra ulna* (Nitzsch) Ehrenb. var. *impressa* Hust. in A. Schmidt, 1914, nom. nudum; *Synedra ulna* (Nitzsch) Ehrenb. var. *impressa* Hust. ex Gemeinhardt, 1926; *Synedra ulna* (Nitzsch) Ehrenb. var. *subconstricta* Oestrup, orthography by Hustedt, 1932.

OCCURRENCE: Epiphytic-epilithic in fresh-brackish waters.

DISTRIBUTION IN UKRAINE: lakes, ponds (Topachevskiy, Oksiyuk, 1960).

GENERAL DISRIBUTION: Cosmopolitan.

REMARK: The first publication of *Synedra ulna* var. *impressa* by Hustedt in Schmidt, Atlas der Diatomenkunde, Taf. 302, fig. 18, 1914 is invalid because there is no description nor diagnosis; the first valid publication at the rank of variety is that by Gemeinhardt 1926. However, because we agree with Hustedt (1932) that *S. ulna* var. *subcontracta* Oestrup 1920. (misspelled "subconstricta" by Hustedt) is a synonym for *S. ulna* (Nitzsch) Ehrenb. var. *impressa* Hust., then the correct name for this variety should be based on the older epithet.

**NEOSYNEDRA delicatissima** (Proshk.-Lavr.) Bukhtyrova comb. nov.

BASIONYM: *Fragilaria delicatissima* Proshk.-Lavr., 1960. Bot. mater. Otd. spor. rast. Bot. Inst. AN SSSR 13: 48, pl. 1, fig. 9.

SYNONYM: *Synedra delicatissima* (Proshk.-Lavr.) Gusl. in Gusl. et al., nom. illeg., non *S. delicatissima* W. Sm.

OCCURRENCE: Epiphytic-epilithic in brackish waters.

DISRIBUTION IN UKRAINE: BS: north-west part (Guslyakov et al., 1992).

GENERAL DISTRIBUTION: Asia (The Sea of Japan).

REMARK: N. Guslyakov in discussion on the revision of genus *Synedra* sensu lato indicated the belonging of this taxon to *Neosynedra*, nevertheless he made there a new combination with *Synedra* genus (Guslyakov et al., 1992).

**ASTARTIELLA stromii** (Hust.) Bukhtiyarova comb. nov.  
BASIONYM: *Achnanthes stromii* Hust. 1933. in Rabenb.'s Kryptogam.-Fl. Deutsch. 7(2/4): 593, fig. 841B.

OCCURRENCE: Epiphytic-epilithic in marine waters, polyhalobious, rare.  
DISRIBUTION IN UKRAINE: BS: Od., north-west part (Guslyakov et al., 1992).

GENERAL DISTRIBUTION: Boreal. Europe (Sweden, Finnland, The Netherlands – seaboard).

**LEMNICOLA hungarica** (Grunow) F.E. Round et Basson var. *pusilla* (Grunow) Bukhtiyarova comb. nov.

BASIONYM: *Achnanthes hungarica* (Grunow) Grunow var. *pusilla* Grunow in Cleve et Grunow 1880. K. Norske Videnskab. Selskab. Skr. 17(2): 23.

OCCURRENCE: Haptobenthic in fresh waters, indifferent to water salinity.  
DISRIBUTION IN UKRAINE: UC: Zk., basins in the middle bed of the Tisa River; middle part of Tisa River (Polischuk, Garasevich, 1986); Zk., basins (Vodop'an, 1981). – MC: ARC, ponds (Kononenko et al., 1965).

GENERAL DISTRIBUTION: Boreal.

ABBREVIATIONS  
Administrative regions of Ukraine: Zk – Zakarpattia, Od – Odessa, ARC – Autonomous Republic of Crimea. Geographical regions of Ukraine: UC – Ukrainian Carpathians, MC – Mountain Crimea, BS – Black Sea.

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#### НОВЫЕ ТАКСОНОМИЧЕСКИЕ КОМБИНАЦИИ В РОДАХ *BACILLARIOPHYTA*

В связи с инвентаризацией флоры диатомовых водорослей Украины предложено 7 новых таксономических комбинаций, из них 4 – для рода *Ulnaria* (Kütz.) Compere и 3 – для родов *Neosynedra* Williams et Round, *Astartiella* Witkowski, Lange-Bertalot et Metzeltin, *Lemnicola* Round et Basson.

Ключевые слова: таксономия, *Ulnaria*, *Neosynedra*, *Astartiella*, *Lemnicola*, *Bacillariophyta*.

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