Instructions for authors

Fottea is the journal published by Czech Phycological Society (formerly bulletin Czech Phycology).

Fottea publishes research on all aspects of algae (including cyanobacteria) from all over the world **with preference** for taxonomy and ecology. Fottea do not accept recently floristic studies such as list of species or floristic records. Floristic papers can be accepted if they are accompanied by taxonomy (e.g., new taxa description, typification) or ecology (robust dataset with sophisticated statistics). Manuscripts submitted must be original and not have been accepted for publication or be under consideration elsewhere. It is the responsibility of authors to ensure that nothing in a submitted manuscript would be in breach of any copyright agreement. It is the responsibility of authors to keep all rules of scientific work in biology – for instance having all permissions for their research (protected areas, protected animals in case of epizoon, adherence to the Nagoya Protocol of access to genetic resources, plagiarism (including self plagiarism). Authors must specify any permissions as appropriate in the Methods, Acknowledgement, or Cover Letter. On acceptance of a manuscript, copyright is transferred to the journal.

The manuscript

Manuscripts may be submitted in the form of **Original Articles** or **Reviews** or **Opinion**, exceptionally **Short notes** and should be submitted preferably via the Manuscript submission system. Please submit your paper in several files: 1. Text, tables and legend to figures in World file, 2. Each figure plate separately as TIFF files in right order (Fig. 1, Fig. 2, ….), 3. Large supplementary tables in Word or Excell. Long contributions such as monographs with photographic plates (up to 60 plates) can also be accepted (deadline for such monographs 1st May). It is essential that manuscripts are written using double spacing throughout (including references and legends) with all margins of at least 3 cm. Do not right-justify or divide words at the ends of lines. The font Times New Roman (12 point) is preferred with the regular font style. Only species names should be in italics. Latin names should be followed by the full or abbreviated authorities (in case of abbreviated authorities please follow *Authors of Plant Names*, Royal Botanic Gardens, Kew; BRUMMITT & POWELL 1992 or http://www.ipni.org/index.html), when first used, unless a large number of names with authorities are grouped in a table. Use “et” in latin names (*Nupela troglophila* Falasco, C.E. Wetzel et Ector). All pages should be numbered in series, with the first page a title page, the second an abstract, followed by the text, references, tables, and legends for figures in that order. Normally, the text should be subdivided into six sections: Introduction, Materials and Methods, Results (or Observations), Discussion, Acknowledgements and References, although this may not be appropriate for some articles (such as some taxonomic papers).
SI (metric) units must be used. Leave a space between numerals and their units (e.g. 10 mm). Abbreviations should be explained in words when first used. Symbols, units, and nomenclature should conform to international usage. Non-English speakers should get the text checked if at all possible, as the editors cannot always be expected to carry out major linguistic revision.

Original Articles should be prepared according to the following format:

The title page should have only the title, the name(s) and address(es) of the author(s), any necessary footnotes, and a short running title suitable for page headings. If the name of an

organism is used in the title, an indication of its taxonomic position must be given. The address for correspondence will be that of the first author unless otherwise indicated by means of a footnote. The corresponding author's e-mail (or fax number) should be included.

The Abstract of not more than 1000 letters including brakes should be concise and informative.

Key words: immediately following the abstract, list 6 to 10 key words (alphabetically), separated by commas.

Acknowledgements should be given under a single heading at the end of the article.

References in the text are cited by author (SMALL CAPS) and publication date. Use "&" between pairs of authors; for three or more authors, give the first author followed by "et al." and the year. Multiple references must be listed in chronological order (e.g. JOOSTEN & VAN DEN HOEK 1986; BREEMAN 1988; BREEMAN et al. 1994a, b). Only cite articles or books already published or in press. In the list at the end of the paper, references should be typed double spaced in alphabetical order. Include publishers and city of publication for books. Abbreviations of journal names should follow the *World List of Scientific Periodicals or the selection Abbreviated Titles of Biological Journals* issued by the Biological Council. References should appear in the following style:

HINDÁK, F.; HINDÁKOVÁ, A.; MARVAN, P.; HETEŠA, J.& HAŠLER, P. (2006): Diversity, abundance and volume biomass of the phytoplankton of the Morava River (Czech Republic, Slovakia) and the Dyje River (Czech Republic) in November 2005. – Czech Phycology 6: 77–97.

KOMÁREK, J. & ANAGNOSTIDIS, K. (1998): Cyanoprokaryota I. – In: ETTL, H.; GÄRTNER, G.; HEYNIG, H. & MOLLENHAUER, D. (eds): Süßwasserflora von Mitteleuropa, Band 19/1. – 548 pp., Gustav Fischer Verlag, Stuttgart–Jena.

WOŁOWSKI, K. & HINDÁK, F. (2005): Atlas of Euglenophytes. – 136 pp., Veda, Bratislava.

KOMÁREK, J. (2003): Coccoid and colonial cyanobacteria. – In: WEHR, J.D. & SHEATH, R.G. (eds): Freshwater Algae of North America. – pp. 59–116, Academic Press, San Diego.

Tables should be numbered consecutively with arabic numerals, double-spaced throughout, on a separate numbered page, have a brief title at the top and be referred to in the text. Tables should not include vertical lines or shading. Tables should not be insert as compact picture. Table width must fit to 7.7 (one column), 16 (two columns) or 24.7 cm (landscape paper), text: Times New Roman, font size 9.

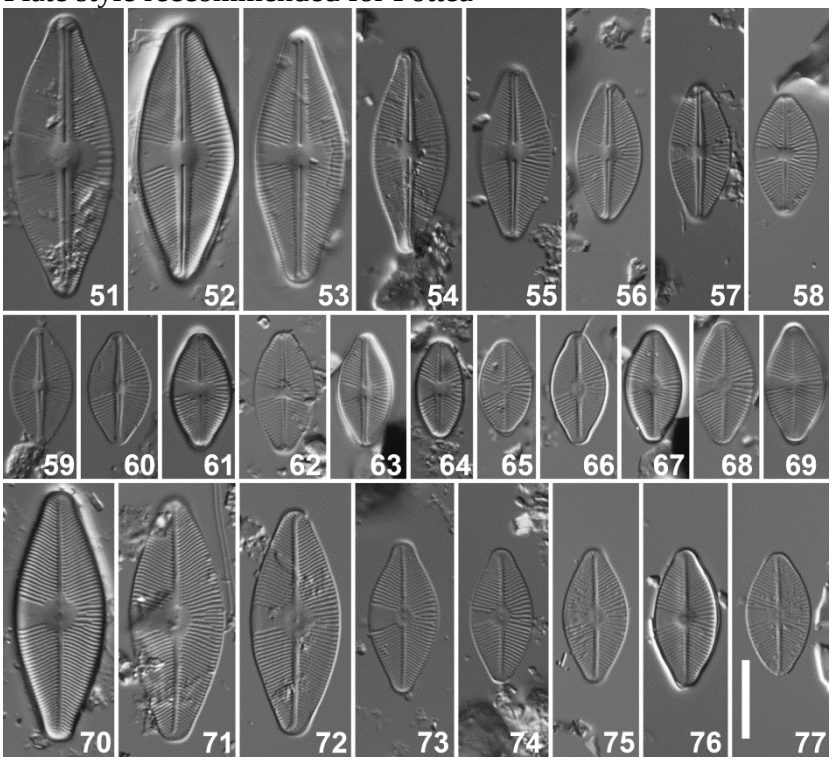
Figures should be planned so that they will fit one column (7.7 cm) or two columns (16 cm) in width, and be no more than 22 cm in length. Allow sufficient space so that the legend can be placed beneath the figure or group. A linear scale must be placed directly on each figure (please follow style of scale bare used in example below). Scale value should be indicated in the legend.

Supplementary material – which will appear as appendix in on line version, not in printed version (very large tables, allignments, supplementary figures) can be in various formats including Pdf. They are usually attached to paper as Appendix in Pdf.

Legends for figures must be typed double-spaced on a separate page and provide enough information for interpretation of the figure, with all abbreviations used.

Line drawings, diagrams, photographs must have good contrast and quality. Groups of photographs forming a single page should be squared accurately and mounted with white spaces between them (the same width, cca 2 mm). Figures should be planned so that the all outer margins are aligned (follow example below). Electronic files should be prepared using standard programs (e.g. Adobe Photoshop, Corel Draw) at a resolution of at least 300dpi (for photographs) and 600dpi (for drawings, maps, phylogenetic trees) and saved as tiff files. Numbers and lettering should be aligned accurately, in Arial font (10-12 bold for figure numbers), black or white depending upon the image background (no circles). Magnification scales should be inserted on the figures, aligned accurately; the length of the line should be given in the legend. **Plates mounted in Word or Power Point cannot be accepted for printing.** Please do not use too large SEM images, 3 gigant diatoms on A4 page realy does not look nice and does not bring more information.

Plate style reccommended for Fottea



Colour photographs may be printed at the expense of the author (aprox. 240 EUR per page) after consultation with the Editor-in-Chief, PDF version may include colour photos free of charge.

Free article access: All papers have open access free of charge, except of monographies published as Fottea Supplements.

Use of units and symbols

Examples: 10 μm, 10 mg.l^{-1}, 10 μmol.m^{-2}.s^{-1}, 10%, 10 °C, 1–5 μm, 19.5±2.1 μm, 2×2 μm, magnification ×1000, chlorophyll–a, β–carotene.

Paragon for formatting of description of new species for science – cyanobacteria and algae (except of diatoms)

***Brasilonema fioreae* D.E. Berthold, M. Barbosa, Lefler et Laughinghouse sp. nov. (Fig. 2)**

Description: Thallus dense, erect, forest green in color, with heteropolar trichomes. Filaments with sheath, fasciculate, straight or bent, slightly tapering, with Scytonemataceae–type false branching. Filaments 15.7–22.9 µm wide ($\bar{X}$: 19.5±2.1 µm). Sheath thin, thicker near branching, hyaline, 3.2±1.2 µm wide. Trichomes cylindrical, straight, slightly constricted at cross–walls, 12.4–20.2 µm wide ($\bar{X}$: 16.4±1.8 µm). Cells somewhat isodiametric, light green to dark grey or orange in color, granulated, highly vacuolated, 12.4–20.2 µm wide × 5.1–10.1 µm long. Apical cells rounded, calyptra not present. Heterocytes common, intercalary, square and sometimes flattened, 12.1–18.3 µm wide × 5.3–11.7 µm long. Akinetes not present. Reproduction by motile and aerosolizing hormogonia.

Holotype: US! Dried material number 227704 deposited in US National Herbarium, Smithsonian Institution, Washington, DC, USA.
Isotype: ……
Type locality: Growing in greenhouses attached to walls, rocks, and planters, Apopka, FL, USA; 28°38'18.8"N, 81°32'53.9"W.
Habitat: Subaerophytic and terrestrial.
Etymology: "*fioreae*" (L) is an epithet that honors Dr. Marli de Fátima Fiore for her dedication and work on cyanobacterial systematics, genetics, and bioactive compounds.
Reference strain: BLCC–T72 culture maintained in University of Florida, Davie, FL, USA and ULC548 (BCCM, University of Liège, Liège, Belgium).
Materials analyzed: strains BLCC–T72, BLCC–T73, BLCC–T83, and BLCC–T86.
GenBank accession numbers: 16S rRNA: MT396512, MT396513, MT396514 and MT396516; 16S–23S rRNA ITS: MT396523, MT396524, MT396525 and MT396527.

Paragon for formatting of descrition of new species for science – diatoms

***Luticola jinshaensis* Yang et Wang sp. nov. (Figs 1–44)**

Description

LM (Figs 1–24): Valves linear–lanceolate to lanceolate with rostrate to subrostrate apices. Valve length 24.0–50.0 µm; valve width 10.0–13.5 µm. Axial area narrow, linear to lanceolate, expanded near central area. Central area asymmetric, rectangular, delimited by 3–4 striae. Slit–like isolated pore in the central area, halfway between valve center and margin. Raphe branches slightly curved. Proximal raphe endings deflected to the opposite side of the isolated pore. Striae radiate, 12–14 in 10 µm, each composed of 3–6 rounded to elliptic areolae, 14–16 in 10 µm. Marginal channel narrow, usually evident in LM.
SEM (Figs 25–36): Externally, valve mantle with 1–3 rows of round areolae, varing in number between the valve apices (1–2 rows) and mid–valve (3 rows) (white arrow in Fig. 28). Striae composed of 3–6 rounded or elongated areolae (Fig. 25). The areolae are usually covered with recessed or ornamented cribra (Fig. 31). Areolae near valve margin have cylindrical opening compared to areolae located next to the axial area (Fig. 30). Isolated pore with a slit–like opening (Figs 25, 29). Proximal raphe endings deflected towards the side opposite the isolated pore (Fig. 29). Distal raphe fissures are, in most case first hooked, deflected towards the same side as the proximal endings and then towards the opposite side, continuing onto the mantle (Fig. 27); occationally they are first hooked towards the same side

of the proximal endings, then towards the opposite side and finally bent the same side as the proximal endings, extending onto valve mantle and continuing onto the mantle (arrow in Fig. 25). Cingular bands have a single row of round pores (arrow in Fig. 26).

Internally, the central area is narrow, laterally expanded to the valve margin (Figs 31, 34). Isolated pore foramina small with round opening occluded by a circular lipped structure (Fig. 33). Poroids of valve face are occluded by hymens forming a continuous strip on each stria, a thin and small silica flap covers the end of the central areolae (arrow in Fig. 34). Proximal raphe ends curved towards the same side of isolated pore (Figs 31, 34); distal external raphe ends hooked towards the isolated pore, extending onto valve mantle, terminating in small helictoglossae (Figs 32, 36). Areolae next to valve margin transversely elongated (arrow in Fig. 35).

Holotype: SHNU! Naphrax slide Z–JSJ–2–036(2)–1, Lab of Algae and Environment, College of Life Sciences, Shanghai Normal University, Shanghai, China. Holotype specimen illustrated in Fig. 4.
Isotype: COLO! Slide number 650061 is deposited in the Kociolek Diatom Collection at the University of Colorado, Boulder.
Type locality: CHINA. Jinsha River, Xiangjiaba reservoir, 28°60'11"N, 103°96'2"E, collected by PAN YU, 5th November 2019.
Habitat: river periphyton.
Etymology: The species is named refers Jinsha River where the species was found.
Ecology: During sampling, the water temperature was 19.8 °C and salinity was 0.2 ppt. Based on the salinity value, the environment is considered freshwater. pH 8.72, DO 7.73 $mg.l^{-1}$, TDS 267.8 $mg.l^{-1}$, Conductivity 370.8 $\mu S.cm^{-1}$, collected in one sample (Z–JSJ–2–036(2)) on the hull of the boat.
Distribution: The species has been found so far only in the type locality.

Explanation:
Description vs Diagnosis – Diagnosis is latin expression used in latin diagnosis. As recently is not latin diagnosis obligatory, use in English description word "Description". In case of diatoms use first characteristics visible in LM (light microscope) followed by SEM (scanning electron microscopy) externally and internally (valve view).
Holotype vs Isotype vs Iconotype
Holotype is obligatory for valid description following Botanical CODE. Material in metabolically inactive form (dried or fixed in case of soft algae or mounted in Naphrax slide or SEM stub in case of diatoms) need to be deposited in official herbarium which have acronyme and is registered in database "index herbariorum" http://sweetgum.nybg.org/science/ih/. After depositing of your material in such herbarium, you should receive access number of your material (different from your slide, sample number). All these informations should be given – acronyme, access number, type of material (dried, fixed,slide, stub), full name of herbarium.
Isotype is not obligatory, but very strongly recommended. It is the same material (subsample) as holotype, but can be deposited in other official herbarium or in private collection in your lab. It would be good to deposit an isotype in one of the larger collections worldwide (London, Berlin, Paris, Philadelphia, Brussels). Although it is not necessary, it is safer to have a type on at least two localities. The burning down of the Museum in Brazil made that very clear!
Iconotype and lectotype is figure – photo or drawing and is used only in cases when holotype has been lost during centuries (in old descriptions)
Type locality need to be specified position of locality together with GPS coordinates, to be possible visit such locality
Habitat – means planktic, benthic, aerophytic, epizoic ….

Reference strain – in case that culture is maintained in some culture collection, number of strain and culture collection address should be given (not obligatory)
Ecology and distribution – not obligatory