

**J. Elster, J. Lyčka: Arktida a její reakce na globální oteplování – příběh české vědy (Živa 2021, 1: 2–5)**

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Jimel, M., Kvíderová, J., Elster, J. 2020: Annual cycle of mat-forming filamentous algae *Tribonema cf. minus* (Stramenopile, Xanthophyceae) in hydro-terrestrial habitats in the Hight Arctic revealed by multiparameter fluorescent staining. *J. Phycol.*, Article ID: JPY13109, Article DOI: 10.1111/jpy.13109, Internal Article ID: 16949844.

Hejduková, E., Elster, J., Nedbalová, L. 2020: Annual cycle of freshwater diatoms in the High Arctic revealed by multiparameter fluorescent staining. *Microbial Ecology*, <https://doi.org/10.1007/s00248-020-01521-w>

Shukla, S. P., Kvíderová, J., Adamec, L., Elster, J. 2020: Ecophysiological features of polar Chlorella-like soil microalgae. *J. Phycol.* 56, 481–495, DOI: 10.1111/jpy.12953

Hejduková, E., Pinseel, E., Vanormelingen, P., Nedbalová, L., Elster, J., Vyverman, W. & Sabbe, K. 2019: Tolerance of pennate diatoms (Bacillariophyceae) to experimental freezing: comparison of polar and temperate strains. *Phycologia*, 1-11, doi.org/10.1080/00318884.2019.1591835

Kvíderová, J., Souquieres, C.-E., Elster, J. 2019: Ecophysiology of photosynthesis of the *Vaucheria* sp. mats in the Svalbard tidal flat. *Polar Science*, DOI: 10.1016/j.polar.2018.11.006

Pichrtová, M., Hájek, T. & Elster, J. 2016: Annual development of conjugating green algae *Zygnema* sp. in Arctic hydro-terrestrial environment. *Polar Biology* DOI: 10.1007/s00300-016-1889-y.

Tashyreva, D. & Elster, J. 2016: Annual cycles of two cyanobacterial mat communities in hudo-terrestrial habitats of the High Arctic. *Microbial Ecology*, 7:16 DOI: 10.3389/fmcb.2016.00016.

Tashyreva, D. and Elster, J. 2015: The limits of desiccation tolerance of Arctic *Microcoleus* strains (Cyanobacteria) and environmental factors inducing desiccation tolerance. *Frontiers in Microbiology*, doi: 10.3389/fmicb.2015.00278.

Pichrtová, M., Hájek, T. & Elster, J. 2014: Osmotic stress and recovery in field populations of *Zygnema* sp. (*Zygnematophyceae, Streptophyta*) on Svalbard (High Arctic) subjected to natural dessication. *FEMS Microbial Ecology*, 89: 270-280, doi: 10.1111/1574-6941.12288

Tashyreva, D. Elster, J. and Billi, D. 2013: A novel staining protocol for multiparameter assessment of cell heterogeneity in *Phormidium* populations (Cyanobacteria) employing fluorescent dyes. *Plos One*, 8/2: 1-12, (IF = 2011- 4.05, (cited time 7).

Elster, J., Kvíderová, J., Hájek, T., Láska, K., Šimek, M. 2012: Warming effect on *Nostoc* colonies (Cyanobacteria) in a wet thufur meadow Central Svalbard: preliminary study. *Polish Polar Research* vol. 33, no. 4, pp. 395-420, 2012 doi: 10.2478/v10183-012-0021-4.

Kvíderová, J., Elster, J. & Šimek, M. 2011: In situ response of *Nostoc* commune s.l. colonies to desiccation, in Central Svalbard, Norwegian High Arctic. *Fottea* 11(1): 87-97.

Elster, J., Degma, P., Kováčik, L., Valentová, L., Šrámková, K., Pereira, A. B. 2008: Freezing and desiccation injury resistance in the filamentous green alga *Klebsormidium* from the Antarctic, Arctic and Slovakia. *Biologia*, 63/6: 839-847. DOI: 10.2478/s11756-008-0111-2.

Machová, K., Elster, J. and Adamec, L. 2008: Xanthophyceen assemblages during winter-spring flood: autecology and ecophysiology of *Tribonema fonticolum* and *T. monochloron*. *Hydrobiologia* 600: 155-168.

Šabacká, M. & Elster, J. 2006: Response of cyanobacteria and algae from Antarctic wetland habitats to freezing and desiccation stress. *Polar Biology* 30 (1): 31-37.