

## Supplementary material

### Algal cell response to laboratory-induced cadmium stress: a multimethod approach

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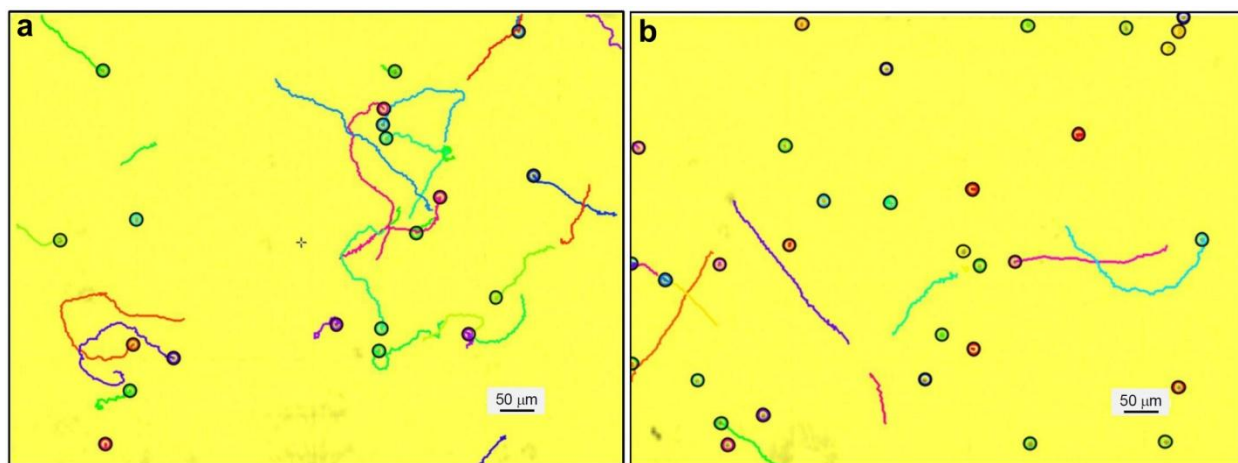
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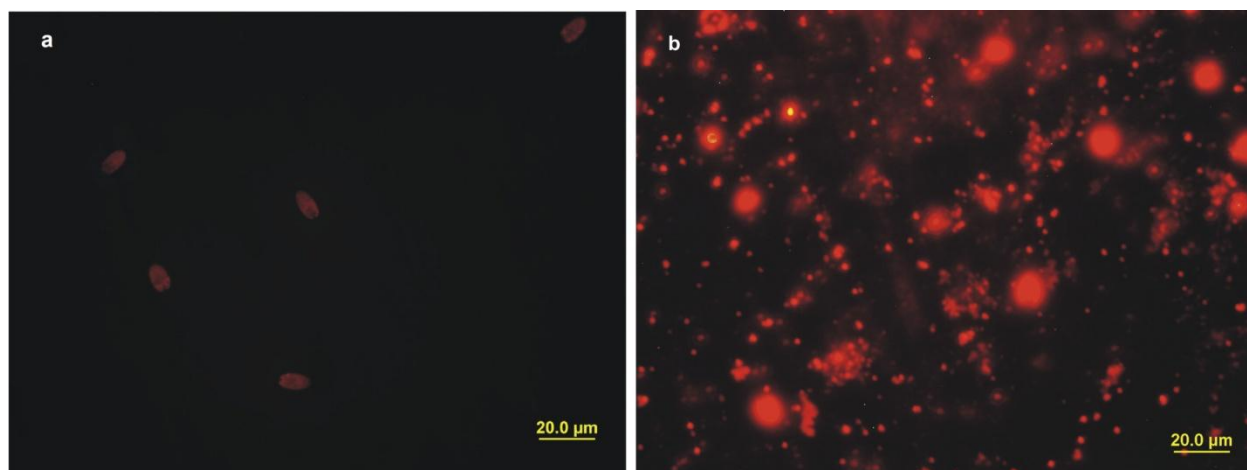
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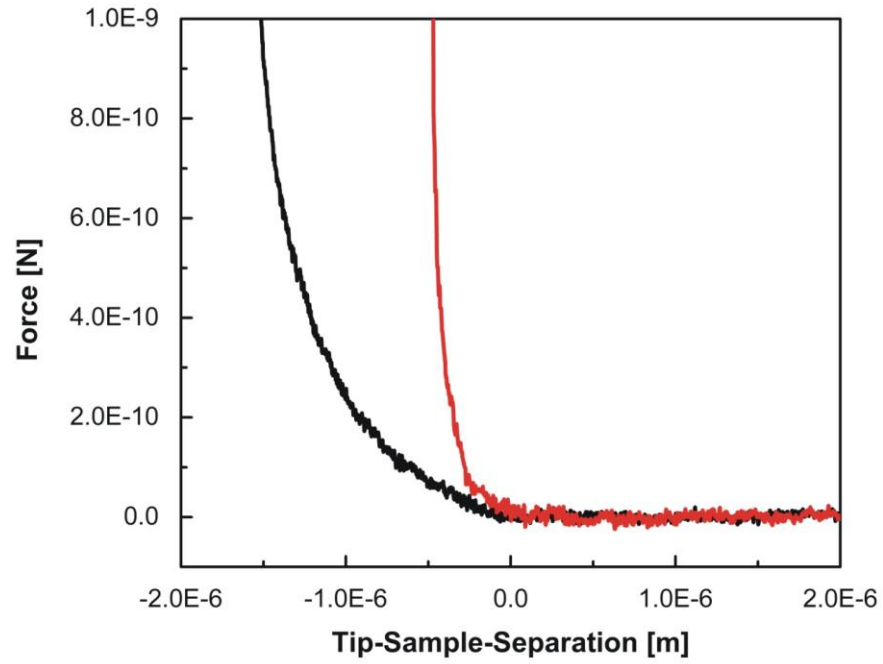
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**Fig. 1SM.** Processed microscopic video recordings of *D. tertiolecta* cells using spot tracking module of ICY software: a) in control samples and b) in 1,000 µg/L of cadmium in culture.



**Fig. 2SM.** Fluorescence micrographs with Nile red staining recorded in a) *D. tertiolecta* cells culture and b) in 1,000 µg/L of cadmium in culture.



**Fig. 3SM.** Typical force spectroscopy retraction curves observed for *D. tertiolecta* cells in the control sample (black curve) and in the presence of cadmium (red curve). The increase in stiffness is visible as an increase in the slope of the first part of the curve.

**Table 1SM.** Comparison of the *D. salina* P20865 protein sequence identified by PMF analysis with the Chlorophyll a-b binding protein of LHCII type I, chloroplastic protein from *D.*

*tertiolecta*

Identified protein sequence	
SP P27517 CB2_DUNTE -----MAALIARSGLKALNIRQTRQORMATVPRAAVEFYGP	36
SP P20865 CB2_DUNSA MQLSTPPEVPDMKNTYSNNECPAAEQELCSEQGGRAGKSTKKGAKAVSKSSSSANQFYGP	60
* :..* :* : :. : :. :* :****	
SP P27517 CB2_DUNTE DRAKFLGPFSENDTPEYLTGEFPGDYGWDTAGLSADPQTFARYREIELIHARWALLGALG	96
SP P20865 CB2_DUNSA DATSGW--DLQHQPRLPTGEFPGDYGWDTAGLSADPETFKRYRELELIHARCGLLGALG	118
* :. :::* . *****:*** ***:***** .*****	
SP P27517 CB2_DUNTE ILTPELLSQYAGVQFGE-PVWFKAGAQIFADGGLNYLGNESLIHAQSIIATLAVQVVLMG	155
SP P20865 CB2_DUNSA MVTPELLADEDGKIFGDAAIWFKAGAAIFQDGGLNYLGNPSLIHAQNIVATLAVQVVLMG	178
: :*****: : * : ** : ***** ** ***** ***** .* :*****	
SP P27517 CB2_DUNTE LAEAYRANGGSEGFLDDLTLYPGGPFDPGLGLADDPDTFAELKVKEIKNGRLAMFSCLG	215
SP P20865 CB2_DUNSA LVEGYRVNGGPAG--EGLDPLYPGEAFDPGLGLADDPDTFAELKVKEIKNGRLAMFACLG	236
* . * . * . * * : . * * * * *****:****	
SP P27517 CB2_DUNTE FVQAIVTGKGPVQNLTDLADPTVKNKAFASATKFTPGV	253
SP P20865 CB2_DUNSA FVQAIVTGKGPIENLTDLANPAENNAFAYATKFTPQ-	273
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