**Contact Information**

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**Manuscript Information (if applicable)**

Title:

Among-strain consistency in the pace and shape of senescence in duckweed

Journal:

Journal of Ecology (in review)

Authors:

Barks PM, Dempsey ZW, Burg TM, Laird RA

**Species Identification Information**

Name Of Species:

*Lemna turionifera* Landolt

Morphological Classification (if applicable):

Molecular Classification:

atpF-atpH barcode:

GenBank accession number MG000358

CTACGCTTAGATTTATTGGATTTGTTGCTAAAATATCGGTATTAAACCCAAAACCGCCGGCGGATGGCCAGTGGCCCAAGGAAACAAAAGAATCAGTTACATTTTGCATATACTCTCCTCTTATAGATAGGACTAAAAAAGAACAGAGTTCTTTTTGTATTACTTCGCCCCCTTTGTTTGATTTCTTTTTTTTATGGGATTTTTAAATGGAATAGATTTAATTAATTAATTTAATTGAGAACTTTTTTATTTATTATTTAATTCTAATTAAAGTTTATAATTACAAGAACATACTTATTGGGTTAGATCCTGGCTATTTTGTCAATTGATAAATACCTTGTTTGTTGCGTTACAACGCATACTCAAAAAAAGTTTTGCATTACATTATACTAAGAACTGAAAACGGGAAGGAAGAAAGCGAGAGGATCTGCTAATTACTAATCCTAAAATCAGTCCTTCCCGGAGGTATTCTCTCAACGAATAAGTAATTGTTAGAGTACAATCTTGATATAATTCGAAGAAGCAAAAAGCAAGTCTAAGTCAAAAAGTCTATTACGTACTTTTTTATTCTAGAATTAAACAAATGGATTCGCAAATAAAAGTGCTAATGCCACAACCAGTCCATAAATTGTTAAA

psbK-psbI barcode:

GenBank accession number MG000432

AACTCTACTGAAAAAATTCATGATTTATTTGCTAAAAAAGATTCTAATAATAATTGATAACGTAATAGCAATCTTAGTTTATACATCCTCATAAAAAATATTTGAATTCTAGTATATTGGATAAAAAGAGCGATAAGTTTGGATCAGTCCATTTCGCCATTCAGGCCGCTCTTCCAGTGAGGAAGTACTTTATTTATTAGCTTTTGTTTTACACAATACTTTATTGTTAATATTAGAGTAAATATTAGAATAACCTTTTCGGTAACGAACAAGTCATAATCTTAATTTAAAATGCATTCATGAGTTTGAAAATTCAGTTTTTGTAGAAAAAACACTTAACTTAATACTATACTTAATAAAATTAAGTATTGTTCTTTCTTTTTTCATAGTTTTTTTCTTGGCATGCCCAAATAATACATGTGTTACATAACTCAAATGGATAATCTATTCCCTTTTACCCCAAAAATGATCCTATCTTGGAGATTGTGTAATGCTT

AFLP-Lemna Genotype:

AFLP-Wolffia Genotype:

Other Sequence:

**Species Collection And Cultivation Information**

Date:

Collected August 8, 2013

Location:

(Provide information on site of collection. Include country, state/province, and city/town. Please be as specific as possible.)

Site ‘Anzac’; strain ‘Anzac A’. Near Anzac, Alberta, Canada. Lat 56.45, Lon -111.04.

Cultivation Information:

(Provide information on cultivation of clone since collection and how it is maintained. Mention if any genetic modifications or any other treatments have been performed on clone that may affect its natural physiology.)

Plants were collected by Patrick Barks. Collected plants were initially rinsed with distilled water and were grown in sterile Modified Hoagland’s E+ liquid growth medium (MHE+; Environment Canada (2007) Biological test method: Test for measuring the inhibition of growth using the freshwater macrophyte *Lemna minor*, 2nd edition. Method Development and Applications section, Environmental Technology Centre, Environment Canada, Ottawa, Ontario. Report EPS 1/RM/37.) for about 24 hours. Plants were then rinsed again in distilled water and submerged in diluted (5-15% v/v distilled water) bleach solutions (6% w/v sodium hypochlorite) for one to five minutes. They were then transferred to sterile Petri dishes with MHE+ and placed in 25 C growth chambers for 10-15 days. The stock culture was started from a single surviving frond whose Petri dish had no evidence of bacterial or fungal contamination. The stock culture was then transferred to an Erlenmeyer flask with MHE+ and were grown in growth chambers at 25 C with a 15:9 light:dark regime. In the Fall of 2013, the stock culture was transferred to a new type of growth medium: 1/2 strength Schenk and Hildebrandt growth medium (Sigma-Aldrich S6765) that had been supplemented with sucrose (6.7 g/L), yeast extract (0.067 g/L), and tryptone (0.34 g/L). Since that time, the stock cultures have mostly been kept in a refrigerator at 8 C to slow growth and extend the interval between stock culture transfers.

**To which Duckweed collection are you able to submit your clone?**

(One of the goals of the RDSC is to have its registered clones available to the community to promote research and applications.)

[x]  RDSC

[ ]  University Of Jena