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Title: Adaptation to a limiting element involves mitigation of multiple elemental imbalances

Year: 2023

Version: Accepted version (Final draft)

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Please cite the original version:

Jeyasingh, P. D., Sherman, R. E., Prater, C., Pulkkinen, K., & Ketola, T. (2023). Adaptation to a limiting element involves mitigation of multiple elemental imbalances. Journal of the royal society interface, 20(198), Article 20220472. https://doi.org/10.1098/rsif.2022.0472

Figure 1

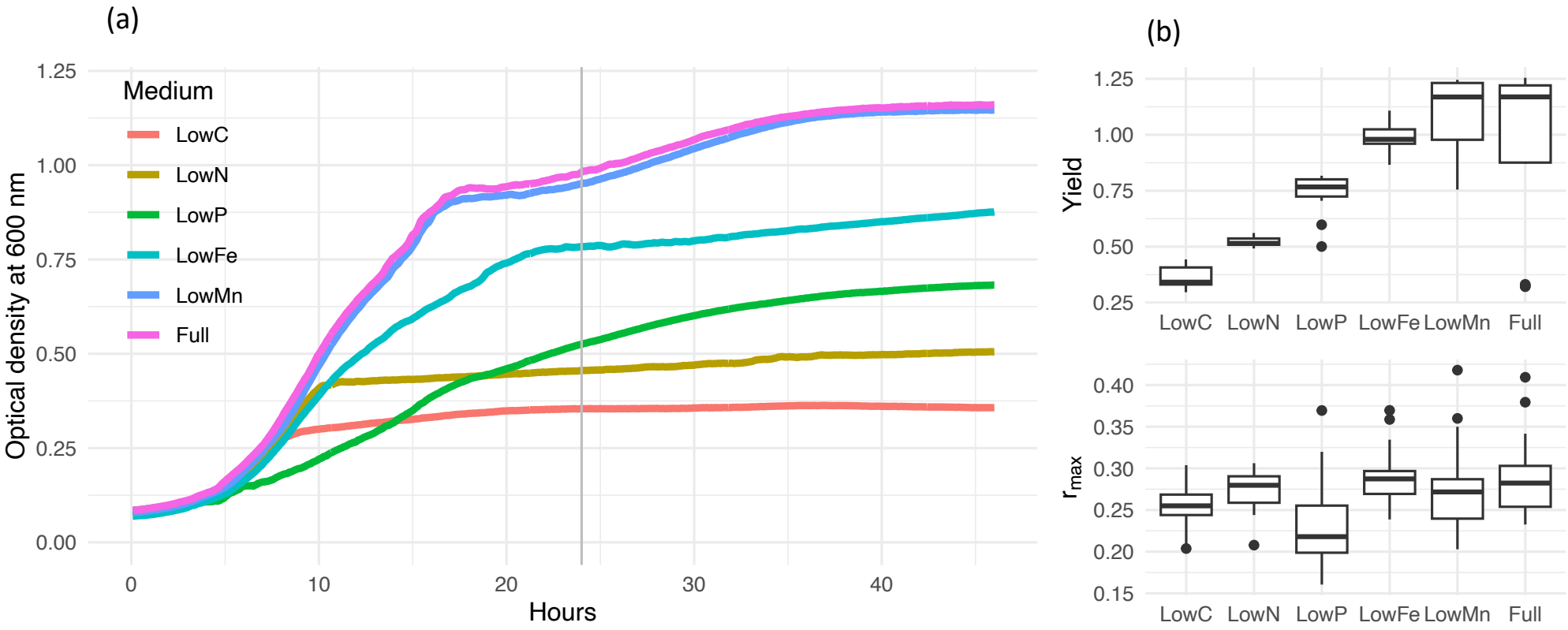

(a)
Medium
LowC
LowN
LowP
LowFe
LowMn
Full
Optical density at 600 nm
1.25
1.00
0.75
0.50
0.25
0.00
0
10
20
30
40
Hours
(b)
Yield
1.25
1.00
0.75
0.50
0.25
LowC
LowN
LowP
LowFe
LowMn
Full
r_{max}
0.40
0.35
0.30
0.25
0.20
0.15
LowC
LowN
LowP
LowFe
LowMn
Full

Figure 2

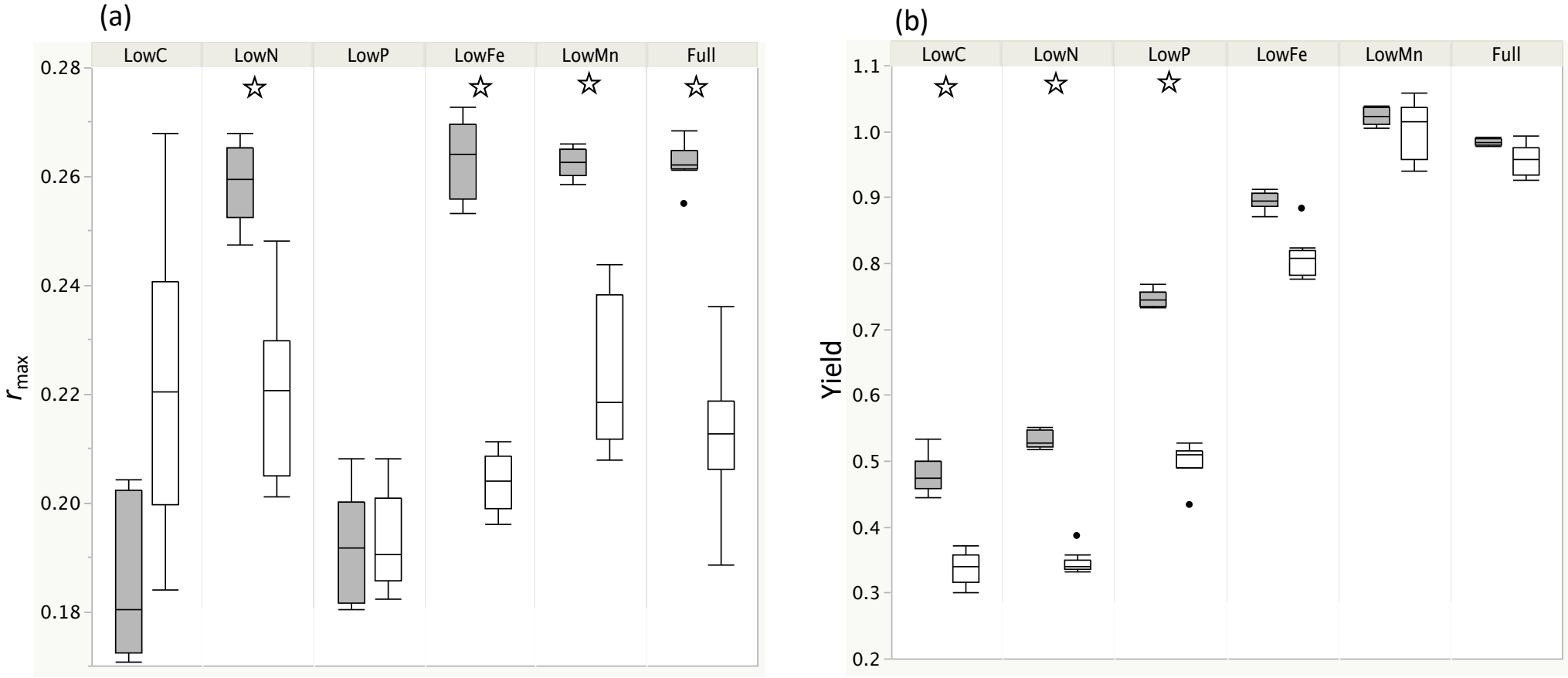
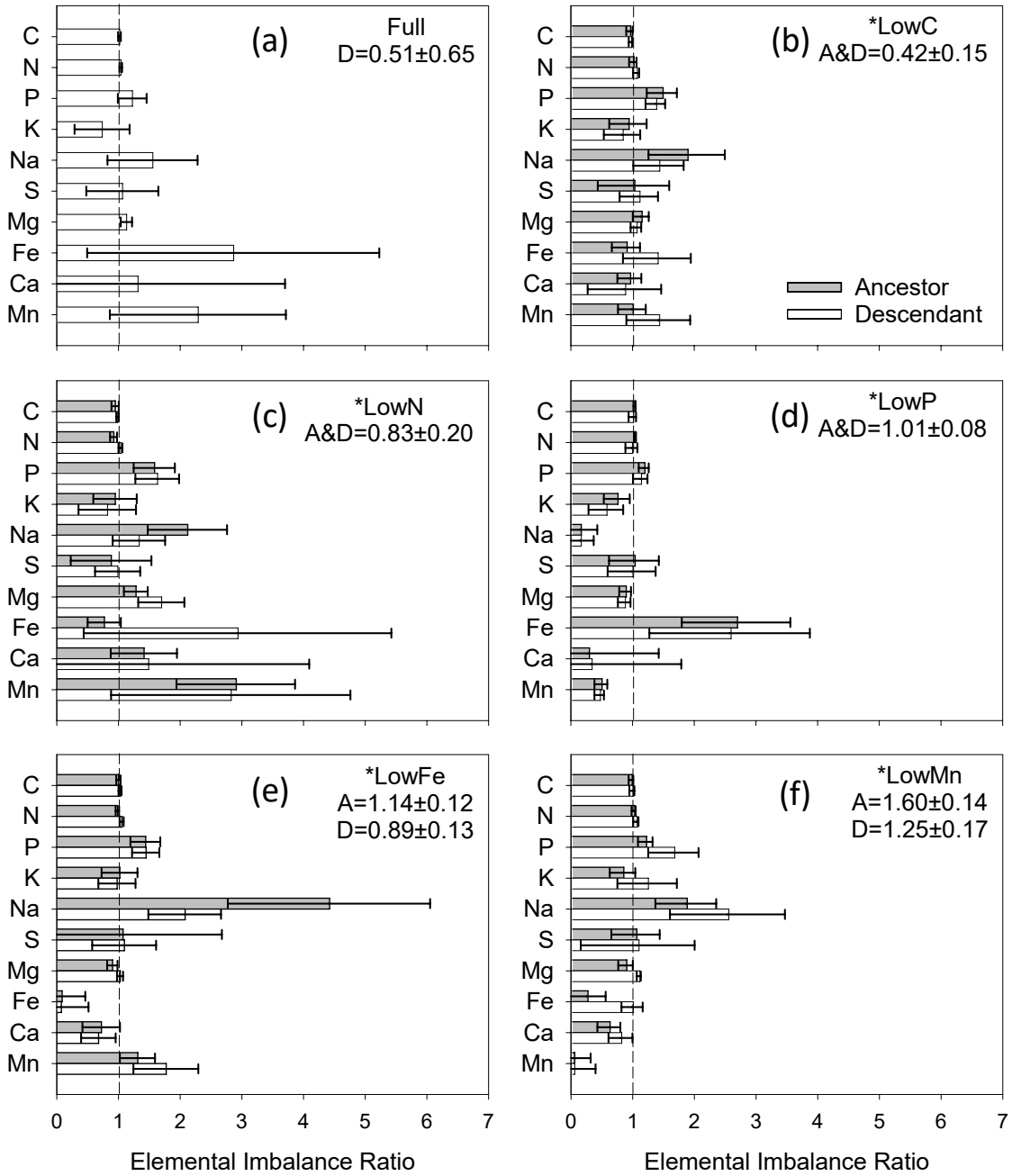

(a)
LowC
LowN
LowP
LowFe
LowMn
Full
0.28
0.26
0.24
0.22
0.20
0.18
r_{max}
(b)
LowC
LowN
LowP
LowFe
LowMn
Full
1.1
1.0
0.9
0.8
0.7
0.6
0.5
0.4
0.3
0.2
Yield

Figure 3


(a)
Full
D=0.51±0.65
(b)
*LowC
A&D=0.42±0.15
Ancestor
Descendant
(c)
*LowN
A&D=0.83±0.20
(d)
*LowP
A&D=1.01±0.08
(e)
*LowFe
A=1.14±0.12
D=0.89±0.13
(f)
*LowMn
A=1.60±0.14
D=1.25±0.17
C
N
P
K
Na
S
Mg
Fe
Ca
Mn
0
1
2
3
4
5
6
7
Elemental Imbalance Ratio