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Supplementary Material

Soil nutritional status in KwaZulu-Natal drives symbiotic interactions and plant performance in *Lessertia frutescens*

N. G. Ngcobo^A, A. O. Aremu^{A,B}, M. A. Pérez-Fernández^C, and A. Magadlela^{A,*}

^ASchool of Life Sciences, College of Agriculture, Engineering and Science, University of KwaZulu-Natal (Westville Campus), Private Bag X54001, Durban 4000, South Africa.

^BFood Security and Safety Niche Area, Faculty of Natural and Agricultural Sciences, North West University, Private Bag X2046, Mmabatho, North West Province, South Africa.

^CDepartment of Physical, Chemical and Natural Systems, Universidad Pablo de Olavide, Carretera de Utrera Km 1, Seville 41013, Spain.

*Correspondence to: A. Magadlela School of Life Sciences, College of Agriculture, Engineering and Science, University of KwaZulu-Natal (Westville Campus), Private Bag X54001, Durban 4000, South Africa
Email: anathimagadlela@icloud.com

Table S1. Chemical properties of the soils from four sites of KwaZulu-Natal grassland and savanna soils (Hluhluwe, Izingolweni, Bergville and Ashburton) used for growing *Lessertia frutescens* plants. Values are expressed as mean \pm SE. Different letters indicate significant differences between KZN sites ($p < 0.001$), $n = 20$.

Parameters	Hluhluwe	Izingolweni	Bergville	Ashburton
pH	4.96 \pm 0.002 ^a	4.62 \pm 0.007 ^a	4.06 \pm 0.007 ^{ac}	5.07 \pm 0.018 ^{ab}
N (μ mol)	0.176 \pm 0.008 ^a	0.127 \pm 0.006 ^b	0.143 \pm 0.007 ^b	0.093 \pm 0.004 ^c
P (μ mol)	0.032 \pm 0.0001 ^a	0.084 \pm 0.016 ^b	0.110 \pm 0.009 ^b	0.065 \pm 0.0001 ^{ab}
K (μ mol)	10.072 \pm 0.249 ^a	1.201 \pm 0.015 ^b	4.631 \pm 0.135 ^c	6.492 \pm 0.137 ^d
Exchange acidity (cmol/L)	0.07 \pm 0.014 ^a	0.06 \pm 0 ^a	1.50 \pm 0.038 ^{ab}	0.06 \pm 0.018 ^{ac}
Total cations (cmol/L)	21.01 \pm 0.184 ^a	11.37 \pm 0.097 ^b	4.18 \pm 0.080 ^c	6.74 \pm 0.069 ^d
Organic C (μ mol)	4.13 \pm 0.002 ^a	3.86 \pm 0.006 ^{ab}	3.39 \pm 0.006 ^b	4.23 \pm 0.015 ^a

Table S2. Percentage of the relative abundance of the identified microbial strains isolated in soils collected from four different sites of KwaZulu-Natal (KZN) soils (Hluhluwe, Izingolweni, Bergville and Ashburton).

Site	Endophyte	Species name	% Relative abundance
Bacteria			
Hluhluwe		<i>Bacillus thuringiensis</i>	49.7
		<i>Lysinibacillus xylanilyticus</i>	35.2
		<i>Bacillus mycoides</i>	4.9
Izingolweni		<i>Bacillus thuringiensis</i>	47.8
		<i>Lysinibacillus xylanilyticus</i>	45.3
		<i>Bacillus cereus</i>	4.8
Bergville		<i>Lysinibacillus xylanilyticus</i>	95
		<i>Bacillus thuringiensis</i>	4.4
		<i>Bacillus cereus</i>	0.3
Ashburton		<i>Lysinibacillus xylanilyticus</i>	87.6
		<i>Bacillus thuringiensis</i>	10
		<i>Bacillus mycoides</i>	1.5
Fungi			
Hluhluwe		<i>Mucor velutinosus</i>	32.3
		<i>Gibberella intermedia</i>	26.9
		<i>Fusarium sinensis</i>	18.3
Izingolweni		<i>Amylomyces rouxii</i>	87.1
		<i>Rhizopus stolonifer</i>	12.9
Bergville		<i>Fusarium concentricum</i>	63.5
		<i>Fusarium oxysporum</i>	24.9
		<i>Amylomyces rouxii</i>	11.6
Ashburton		<i>Rhizopus stolonifer</i>	82
		<i>Fusarium concentricum</i>	18