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Biochemical properties of highly mineralised and infertile soil modified by acacia and spinifex plants in northwest Queensland, Australia

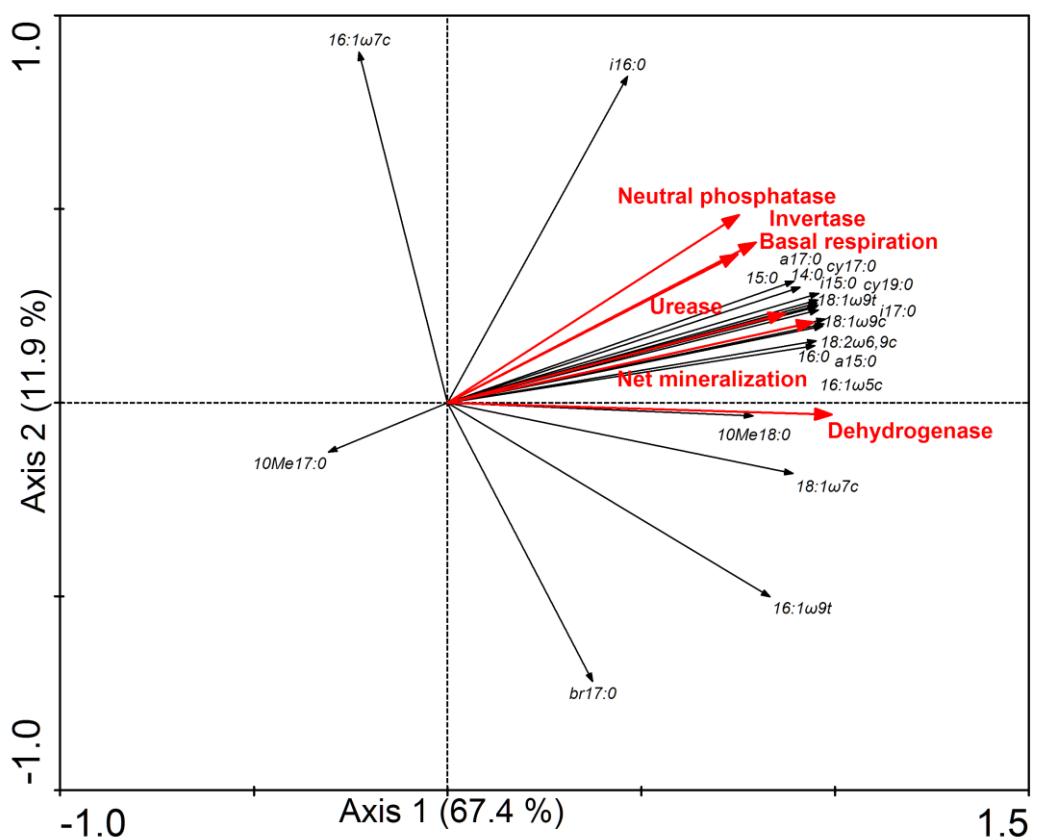
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Supplementary Fig. 1. RDA-function ordination biplot of individual phospholipid fatty acids (PLFAs) and biochemical processes.

Supplementary Table 1. Summary of representative fatty acids for typical microbial community

Microbial community	Representative PLFAs
Actinomycetes	10Me 18:0
AMF	16:1ω5c
Fungi	18:2ω6,9c, 18:1ω9c and 18:1ω9t.
Bacteria	G+ bacteria i15:0, a15:0, i16:0, a17:0, i17:0 and br17:0 G- bacteria 16:1ω7c, cy17:0, 18:1ω7 and cy19:0. Other bacteria 14.0, 15:0, 16:0,
Others	11:0, 18:0, and 10Me 19:0

Supplementary Table 2. Correlation between soil properties and microbial properties

	Basal respiration rate	Net mineralization rate	Dehydro- genase	Invertase	Urease	Neutral phosphatase	Total PLFAs
WH C	0.61	0.83*	0.77	0.70	0.87*	0.74	0.83*
pH	-0.96**	-0.93**	-0.80	-0.80	-0.93*	-0.74	-0.86*
CEC	0.86*	0.84*	0.69	0.82*	0.90*	0.79	0.77
EC	-0.94**	-0.98**	-0.87*	-0.95*	-0.97**	-0.76	-0.93**
TOC	0.92**	0.97*	0.85*	0.92*	0.99*	0.76	0.91*
TN	0.91*	1.00**	0.93*	0.92**	0.98**	0.71	0.97**
MBC	0.91	0.99**	0.95**	0.90*	0.95*	0.66	0.97**

** $P < 0.01$; * $P < 0.05$; $n = 6$.