

Supplementary material for

Nitrogen fixation in summer-grown soybean crops and fate of fixed-N over a winter fallow in subtropical sugarcane systems

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Fig. S1. Location of paddocks used for soybean N fixation assessment.

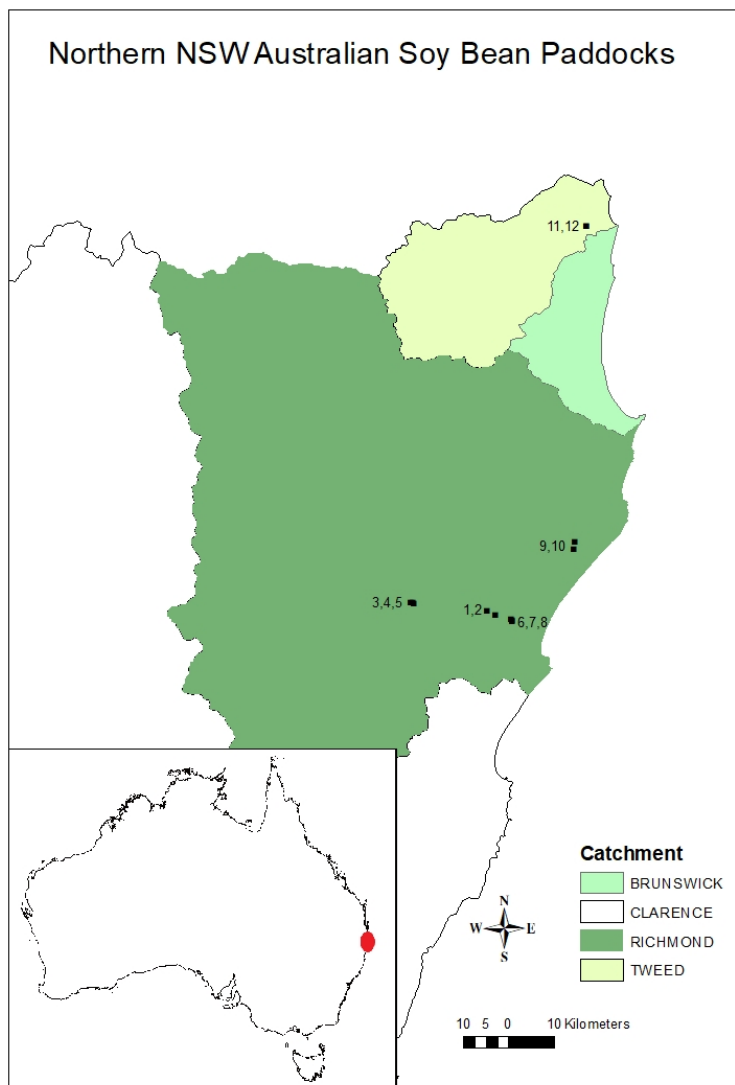


Table S1. Selected soil chemical properties of the 0-100 mm layer and mineral N to 0.9 m in 12 fields sown to soybean

Analyses of 0-100 mm soil layer were undertaken at Environmental Analysis Laboratories, Lismore, NSW, Australia, using methods from Rayment and Lyons (2010)

Soil property	Location	Swan Bay		Coraki			Woodburn			Ballina		Chinderah	
	Field	1	2	3	4	5	6	7	8	9	10	11	12
Total C (%)		4.06	2.91	5.94	4.59	4.41	3.58	2.79	2.79	3.71	2.30	5.45	5.87
Total N (%)		0.44	0.21	0.59	0.47	0.42	0.32	0.25	0.25	0.27	0.19	0.35	0.38
pH (CaCl ₂)		5.17	5.66	5.81	6.05	6.17	5.31	5.22	5.22	5.17	5.21	5.19	4.88
EC (dS m ⁻¹)		0.15	0.06	0.17	0.12	0.25	0.08	0.09	0.09	0.10	0.06	0.15	0.34
Bray 1 P (mg kg ⁻¹)		8.6	18	184	105	60	7.3	18	18	9.6	59	21	12
CEC (cmol ⁺ kg ⁻¹)		4.9	3.5	6.8	7.9	16.2	27.1	24.3	24.3	10.3	7.9	4.5	12.5
Mineral N to 0.9 m (kg ha ⁻¹)		185	127	188	117	165	39	38	38	106	52	72	33
<i>Base cations (%)</i>													
Calcium		34.9	45.8	68.3	62.8	64.5	39.9	39.6	39.6	23.4	30.4	53.0	32.7
Magnesium		35.2	37.3	23.4	30.6	30.9	38.9	35.9	35.9	35.3	24.5	14.2	14.8
Potassium		1.7	3.1	3.4	1.9	2.0	2.2	2.2	2.2	2.9	2.7	4.6	1.8
Sodium		2.2	1.8	1.4	2.8	1.7	2.3	2.5	2.5	2.7	2.0	1.6	3.7
Aluminium		14.2	6.8	1.6	0.7	0.2	9.9	11.5	11.5	20.7	23.6	14.4	19.0

Reference

Rayment GE, Lyons DJ (2010) 'Soil chemical methods: Australasia.' (CSIRO Publishing: Melbourne)