SUPPLEMENTARY DATA

Supplementary Table 1. Soil analytical parameters

Soil layer		pH (H$_2$O)	SOC	P	Ca	Mg	K	Na	CEC pH7	BS pH7
LB2 Site	cm		g kg^{-1}	mg kg^{-1}			cmol$_c$ kg^{-1}			%
A	0 – 25	5.1	14.6	8.5	7.0	1.7	0.38	0.64	14.0	69
B$_{t1}$	25 – 45	6.2	9.8	5.1	21.2	3.9	0.34	1.00	34.1	78
B$_{t2}$	45 – 70	7.0	5.5	5.7	22. 8	4.2	0.40	1.16	36.6	78
BC	70 – 85	7.1	4.7	5.7	21.6	3.6	0.37	1.07	34.3	78
C	85– 100	7.6	2.6	4.0	23.4	3.9	0.41	1.44	37.4	78
L1 Site										
A	0 – 15	5.4	11.9	19.1	6.4	1.3	0.16	0.52	12.4	67
AB	15 – 30	5.5	11.3	7.4	9.6	1.6	0.15	0.66	16.8	72
B$_{t1}$	30 – 60	5.9	6.2	4.0	17.0	3.0	0.28	0.70	27.5	76
B$_{t2}$	60 – 90	6.4	4.1	3.5	17.0	3.0	0.28	0.74	27.6	76
BC	90 – 120	7.8	2.3	4.6	30.3	3.5	0.35	0.99	44.5	79

Supplementary Table 2. Composition of vinasse used in the experiments and doses of nutrients applied to the crop with the different treatments.

	N	P	K	Mg	Ca	Na
Vinasse composition (kg m^{-3})	0.73	0.06	3.45	0.48	0.53	0.13
V150 dose (kg ha^{-1})	109	9	517	72	79	19
V300 dose (kg ha^{-1})	218	18	1034	144	158	38
F dose (kg ha^{-1})	140	-	117	-	-	-