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Soil Research

Supplementary Material

Soil carbon, organic matter fractions, and soil physical quality under different sugarcane harvesting systems in north-east Brazil

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Appendix supplementary

Appendix S1. Soil carbon (C) content under native vegetation (NV), burnt (Bs) and unburnt (Us) sugarcane harvesting systems, in the 0-10, 10-20, 20-30 and 30-50 cm layers.

C (g kg ⁻¹)				
Farm 1				
Soil layer (cm)	F1Us12	F1Us17	F1Bs	F1NV
0-10	12,17 bA	15,6 abA	13,47 abA	23,11 aA
10-20	8,50 bB	12,00 aA	10,74 abAB	12,03 aB
20-30	7,13 bBC	7,93 abB	9,16 abBC	9,31 aB
30-50	6,53 aC	7,15 aB	8,07 aC	6,95 aC
Farm 2				
	F2Us3	F2Us9	F2Bs	F2NV
0-10	9,92 cA	16,47 bA	13,63 bcA	28,50 aA
10-20	8,26 cAB	12,23 bcA	13,02 bAB	23,21 aAB
20-30	5,83 cB	7,16 cB	10,97 bAB	16,70 aBC
30-50	3,64 cC	6,73 bB	8,97 abB	12,34 aC
Farm 3				
	F3Us4	F3Us8	F3Bs	F3NV
0-10	11,99 bA	12,50 abA	12,66 abA	22,34 aA
10-20	10,66 abA	9,42 bAB	8,66 bB	16,97 aAB
20-30	8,71 aAB	8,06 aB	8,43 aB	11,27 aBC
30-50	7,23 aB	7,79 aB	7,51 aB	8,71 aC

Values followed by the same lowercase letter in the rows and the same uppercase letter in the columns within the same land-use do not differ according to Tukey's test (p<0.05).

Appendix S2. Soil bulk density (BD) under native vegetation (NV), burnt (Bs) and unburnt (Us) sugarcane harvesting systems, in the 0-10, 10-20, 20-30, and 30-50 cm layers.

BD (g/cm ⁻³)				
Farm 1				
Soil layer (cm)	F1Us12	F1Us17	F1Bs	F1NV
0-10	1,38 bA	1,39 bA	1,61 cB	1,05 aA
10-20	1,42 aA	1,51 aA	1,48 aAB	1,38 aB
20-30	1,56 aA	1,45 aA	1,45 aA	1,45 aB
30-50	1,44 aA	1,35 aA	1,27 aA	1,39 aB
Farm 2				
	F2Us3	F2Us9	F2Bs	F2NV
0-10	1,39 bA	1,42 bA	1,37 bB	1,02 aA
10-20	1,50 cAB	1,54 cAB	1,27 bAB	1,09 aA
20-30	1,60 bB	1,63 bB	1,24 aAB	1,14 aA
30-50	1,49 bAB	1,51 bAB	1,13 aA	1,09 aA
Farm 3				
	F3Us4	F3Us8	F3Bs	F3NV
0-10	1,54 cA	1,26 abAB	1,41 bcA	1,06 aA
10-20	1,45 abA	1,45 abB	1,48 bA	1,23 aA
20-30	1,38 abA	1,42 abB	1,50 bA	1,22 aA
30-50	1,33 aA	1,19 aA	1,40 aA	1,11 aA

Values followed by the same lowercase letter in the rows and the same uppercase letter in the columns within the same land-use do not differ according to Tukey's test (p<0.05).