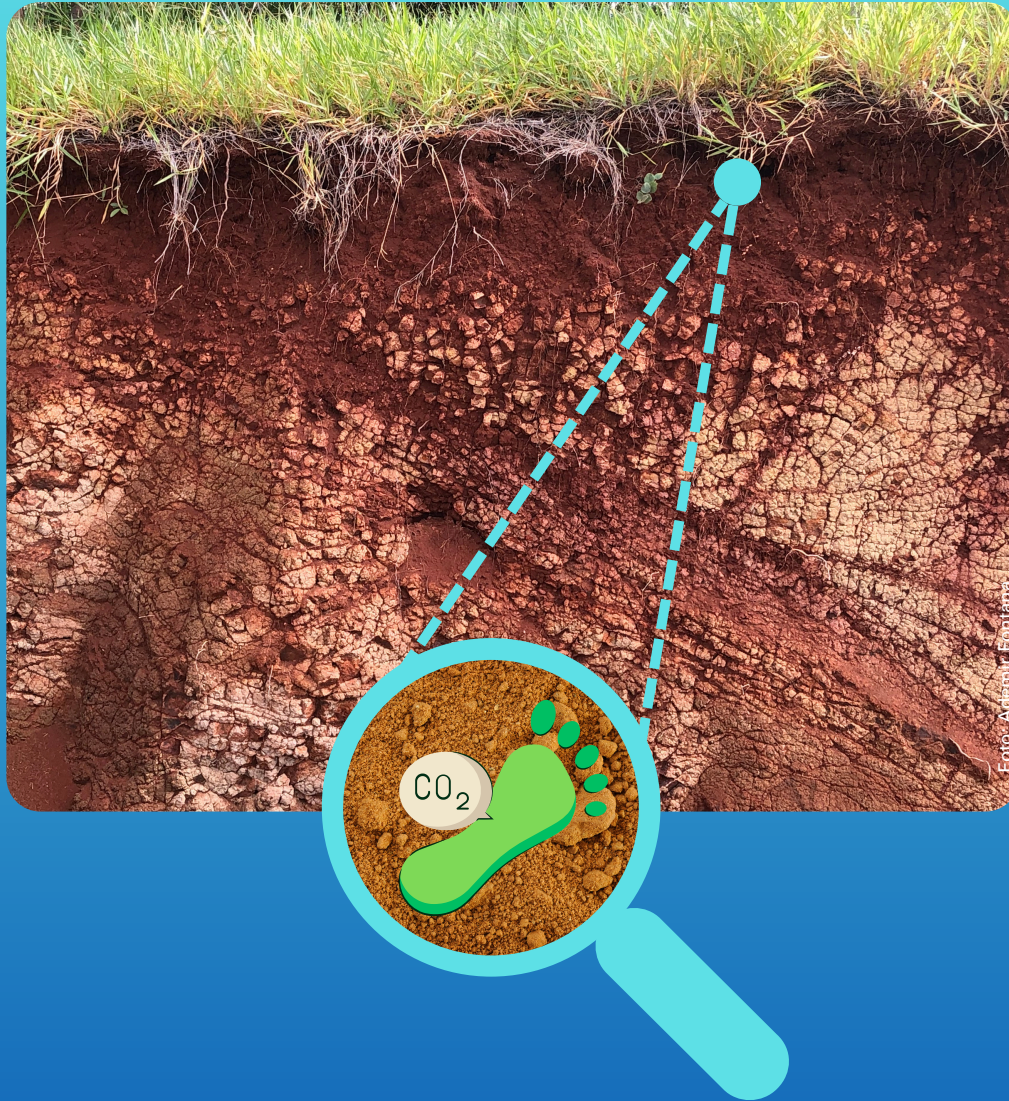


Níveis de referência de carbono orgânico no solo sob vegetação natural dos biomas no estado do Mato Grosso do Sul



Apresentação

O teor de carbono orgânico (C org) apresentado na forma de categorias ou níveis é adequado para do estado atual e o potencial de acúmulo de matéria orgânica nos solos.

Estes níveis podem ser utilizados como orientadores para a avaliação e o monitoramento da influência das culturas, arranjos de culturas ou sistemas de cultivo e das práticas e/ou manejo no incremento de matéria orgânica nos solos cultivados.

O estabelecimento dos níveis (baixo, médio e alto) leva em consideração variações das camadas de solo até a profundidade de 40 cm e em diferentes formas de avaliação: i) por bioma e textura (Tabelas 1 a 3); ii) por bioma (Tabela 4); iii) por textura (Tabela 5); iv) em geral (Tabela 6). Para mais detalhes do desenvolvimento do consultar Fontana et al. (2024).

Algumas classes de textura têm dados em quantidade insuficiente para definição dos níveis, especialmente, a classe siltosa. Na condição por bioma e textura, foram avaliadas de forma conjuntas as texturas argilosa e muito argilosa.

Teores das frações granulométricas para obtenção dos grupamentos texturais.

Classe textural	Areia Total	Argila	Areia Total - Argila
	g kg ⁻¹		
Arenosa	-	-	> 700
Média	> 150	< 350	-
Argilosa	-	≥ 350 ≤ 600	-
Muito Argilosa	-	> 600	-
Siltosa	≤ 150	< 350	-

Fonte: Santos et al. (2018). Sistema Brasileiro de Classificação de Solos – SiBCS.

Tabela 1. Níveis de C org (g kg⁻¹) nas camadas (cm) e classes texturais do solo sob vegetação natural do bioma Cerrado no estado do Mato Grosso do Sul.

Nível	0-10	10-20	20-30	30-40	0-20	20-40
Arenosa						
Baixo	< 3,0	< 2,0	< 1,0	< 1,0	< 2,0	< 1,0
Médio	3,0-9,0	2,0-6,0	1,0-4,0	1,0-4,0	2,0-7,0	1,0-4,0
Alto	> 9,0	> 6,0	> 4,0	> 4,0	> 7,0	> 4,0
Média						
Baixo	< 5,0	< 4,0	< 3,0	< 2,0	< 5,0	< 3,0
Médio	5,0-15,0	4,0-10,0	3,0-8,0	2,0-7,0	5,0-14,0	3,0-8,0
Alto	> 15,0	> 10,0	> 8,0	> 7,0	> 14,0	> 8,0
Argilosa + Muito Argilosa						
Baixo	< 11,0	< 8,0	< 6,0	< 5,0	< 10,0	< 6,0
Médio	11,0-34,0	8,0-25,0	6,0-18,0	5,0-15,0	10,0-29,0	6,0-17,0
Alto	> 34,0	> 25,0	> 18,0	> 15,0	> 29,0	> 17,0

Teor em % = teor em g kg⁻¹ dividido por 10.

Tabela 2. Níveis de C org (g kg⁻¹) nas camadas (cm) e classes texturais do solo sob vegetação natural do bioma Mata Atlântica no estado do Mato Grosso do Sul.

Nível	0-10	10-20	20-30	30-40	0-20	20-40
Arenosa						
Baixo	< 4,0	< 3,0	< 2,0	< 2,0	< 3,0	< 2,0
Médio	4,0-11,0	3,0-8,0	2,0-7,0	2,0-6,0	3,0-9,0	2,0-6,0
Alto	> 11,0	> 8,0	> 7,0	> 6,0	> 9,0	> 6,0
Média						
Baixo	< 5,0	< 3,0	< 2,0	< 2,0	< 3,0	< 2,0
Médio	5,0-15,0	3,0-9,0	2,0-7,0	2,0-7,0	3,0-10,0	2,0-7,0
Alto	> 15,0	> 9,0	> 7,0	> 7,0	> 10,0	> 7,0
Argilosa + Muito Argilosa						
Baixo	< 11,0	< 8,0	< 6,0	< 6,0	< 9,0	< 6,0
Médio	11,0-34,0	8,0-23,0	6,0-18,0	6,0-17,0	9,0-28,0	6,0-18,0
Alto	> 34,0	> 23,0	> 18,0	> 17,0	> 28,0	> 18,0

Teor em % = teor em g kg⁻¹ dividido por 10.

Tabela 3. Níveis de C org (g kg⁻¹) nas camadas (cm) e classes texturais do solo sob vegetação natural do bioma Pantanal no estado do Mato Grosso do Sul.

Nível	0-10	10-20	20-30	30-40	0-20	20-40
Arenosa						
Baixo	< 3,0	< 2,0	< 1,0	< 1,0	< 2,0	< 1,0
Médio	3,0-8,0	2,0-4,0	1,0-3,0	1,0-2,0	2,0-6,0	1,0-3,0
Alto	> 8,0	> 4,0	> 3,0	> 2,0	> 6,0	> 3,0
Média						
Baixo	< 8,0	< 6,0	< 3,0	< 2,0	< 7,0	< 3,0
Médio	8,0-25,0	6,0-18,0	3,0-9,0	2,0-5,0	7,0-21,0	3,0-8,0
Alto	> 25,0	> 18,0	> 9,0	> 5,0	> 21,0	> 8,0
Argilosa + Muito Argilosa						
Baixo	< 9,0	< 9,0	< 5,0	< 4,0	< 9,0	< 5,0
Médio	9,0-27,0	9,0-26,0	5,0-16,0	4,0-12,0	9,0-27,0	5,0-16,0
Alto	> 27,0	> 26,0	> 16,0	> 12,0	> 27,0	> 16,0

Teor em % = teor em g kg⁻¹ dividido por 10.

Tabela 4. Níveis de C org (g kg⁻¹) nas camadas (cm) do solo e biomas sob vegetação natural no estado do Mato Grosso do Sul.

Nível	0-10	10-20	20-30	30-40	0-20	20-40
Cerrado						
Baixo	< 6,0	< 4,0	< 4,0	< 3,0	< 5,0	< 4,0
Médio	6,0-18,0	4,0-13,0	4,0-12,0	3,0-10,0	5,0-15,0	4,0-11,0
Alto	> 18,0	> 13,0	> 12,0	> 10,0	> 15,0	> 11,0
Mata Atlântica						
Baixo	< 5,0	< 4,0	< 3,0	< 2,0	< 5,0	< 3,0
Médio	5,0-15,0	4,0-11,0	3,0-9,0	2,0-7,0	5,0-13,0	3,0-9,0
Alto	> 26,0	> 11,0	> 9,0	> 7,0	> 13,0	> 9,0
Pantanal						
Baixo	< 6,0	< 4,0	< 2,0	< 2,0	< 6,0	< 2,0
Médio	6,0-19,0	4,0-13,0	2,0-7,0	2,0-5,0	6,0-17,0	2,0-6,0
Alto	> 19,0	> 13,0	> 7,0	> 5,0	> 17,0	> 6,0

Teor em % = teor em g kg⁻¹ dividido por 10.

Tabela 5. Níveis de C org (g kg⁻¹) nas camadas (cm) e classes texturais do solo sob vegetação natural no estado do Mato Grosso do Sul.

Nível	0-10	10-20	20-30	30-40	0-20	20-40
Arenosa						
Baixo	< 3,0	< 2,0	< 1,0	< 1,0	< 2,0	< 1,0
Médio	3,0-9,0	2,0-5,0	1,0-4,0	1,0-4,0	2,0-7,0	1,0-4,0
Alto	> 9,0	> 5,0	> 4,0	> 4,0	> 7,0	> 4,0
Média						
Baixo	< 6,0	< 4,0	< 3,0	< 2,0	< 5,0	< 3,0
Médio	6,0-18,0	4,0-11,0	3,0-8,0	2,0-7,0	5,0-15,0	3,0-8,0
Alto	> 18,0	> 11,0	> 8,0	> 7,0	> 15,0	> 8,0
Argilosa						
Baixo	< 11,0	< 8,0	< 6,0	< 4,0	< 10,0	< 5,0
Médio	11,0-32,0	8,0-25,0	6,0-16,0	4,0-12,0	10,0-29,0	5,0-16,0
Alto	> 32,0	> 25,0	> 16,0	> 12,0	> 29,0	> 16,0
Muito Argilosa						
Baixo	< 11,0	< 8,0	< 7,0	< 6,0	< 10,0	< 6,0
Médio	11,0-34,0	8,0-25,0	7,0-19,0	6,0-18,0	10,0-29,0	6,0-18,0
Alto	> 34,0	> 25,0	> 19,0	> 18,0	> 29,0	> 18,0

Teor em % = teor em g kg⁻¹ dividido por 10.

Tabela 6. Níveis de C org (g kg⁻¹) nas camadas (cm) do solo sob vegetação natural no estado do Mato Grosso do Sul.

Nível	0-10	10-20	20-30	30-40	0-20	20-40
Baixo	< 6,0	< 4,0	< 3,0	< 3,0	< 5,0	< 3,0
Médio	6,0-18,0	4,0-12,0	3,0-10,0	3,0-8,0	5,0-15,0	3,0-9,0
Alto	> 18,0	> 12,0	> 10,0	> 8,0	> 15,0	> 9,0

Teor em % = teor em g kg⁻¹ dividido por 10.

Foto: Ademir Fontana



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Para informações mais detalhadas, baixe o PDF do **Boletim de Pesquisa e Desenvolvimento 289** da **Embrapa Solos**.

