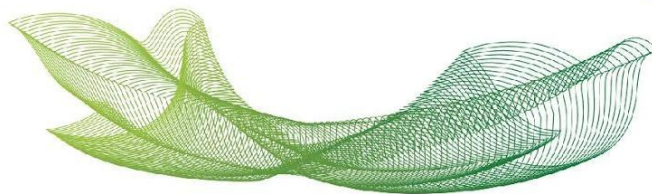


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Resumo	<p>The indiscriminate use of chemical pesticides increasingly harms the health of living beings and the environment. Thus, biological control carried out by microorganisms has gained prominence, since it consists of an environmentally friendly alternative to the use of pesticides for controlling plant diseases. Herein, we evaluated the potential role of endophytic <i>Trichoderma</i> strains isolated from forest species of the Cerrado-Caatinga ecotone as biological control agents of crop pathogenic fungi. Nineteen <i>Trichoderma</i> strains were used to assess the antagonistic activity by in vitro bioassays against the plant pathogens <i>Colletotrichum truncatum</i>, <i>Lasiodiplodia theobromae</i>, <i>Macrophomina phaseolina</i>, and <i>Sclerotium delphinii</i> isolated from soybean, cacao, fava bean, and black pepper crops, respectively. All <i>Trichoderma</i> strains demonstrated inhibitory activity on pathogen mycelial growth, with maximum percent inhibition of 70% against <i>C. truncatum</i>, 78% against <i>L. theobromae</i>, 78% against <i>M. phaseolina</i>, and 69% against <i>S. delphinii</i>. Crude methanol extracts (0.5 to 2.0 mg mL<sup>-1</sup>) of <i>Trichoderma</i> strains were able to inhibit the growth of <i>C. truncatum</i>, except <i>Trichoderma</i> sp. T3 (UFPIT06) and <i>T. orientale</i> (UFPIT09 and UFPIT17) at 0.5 mg mL<sup>-1</sup>, indicating that the endophytes employ a biocontrol mechanism related to antibiosis, together with multiple mechanisms. Discriminant metabolites of <i>Trichoderma</i> extracts were unveiled by liquid chromatography-tandem mass spectrometry-based metabolomics combined with principal component analysis (PCA), which included antifungal metabolites and</p>



	<p>molecules with other bioactivities. These results highlight the biocontrol potential of <i>Trichoderma</i> strains isolated from the Cerrado-Caatinga ecotone against crop pathogenic fungi, providing support for ongoing research on disease control in agriculture.</p>
Fomento	<p>O FWAS é apoiado pelo Conselho Nacional de Desenvolvimento Científico e Tecnológico (CNPq/PIBIC). CPC e MNE são suportados pelo MackPesquisa. A AARS conta com o apoio da Coordenação de Aperfeiçoamento de Pessoal de Nível Superior (CAPES, Código Financeiro 001). O AMP é financiado pela Fundação de Amparo à Pesquisa do Estado de São Paulo (FAPESP, bolsa número 2019/04314-6). Financiamento para taxa de acesso aberto: MackPesquisa.</p>