

Supplementary Material

Sulfite detection

Initially, we performed an assay to verify the sensitivity of dermatophytes to cysteine. An aliquot of 50 μ L of the inocula was placed onto the surface of agar plates with M9 medium (Sigma-Aldrich®) supplemented with 0.5% glucose, 1.5% agar, and 50 mM L-cysteine. The plates were incubated for seven days at 28°C to verify the presence or absence of growth under these conditions. The next step of sulfite detection was performed with the strains that grew in M9 with L-cysteine. For this, tubes containing 0.5 mL of the fungal inoculum were incubated with 9.5 mL of M9 medium (broth) supplemented with 10 mM L-cysteine. The material was incubated for seven days at 28°C and centrifuged at 1000g for 3 minutes. According to the manufacturer's instructions, the supernatant was used for the sulfite detection kit (Sigma-Aldrich®). This assay is based on sulfite oxidation to sulfate producing a stable signal at 570 nm [32].

The detection of sulfite assay was performed with *T. rubrum* ATCC 28188 as a fungal model. We excluded *M. canis* ATCC 36295 and *N. gypsea* ATCC 24102 strains on detection of sulfite assay because they did not grow in M9 medium supplemented with L-cysteine. The excess of free L-cysteine may be toxic to the fungi; therefore, analyzing the survival of the strains in media enriched with L-cysteine is a relevant assumption. RIP3 inhibited the formation and secretion of sulfite significantly ($p < 0.05$) and was more potent than CPX (Figure S1).

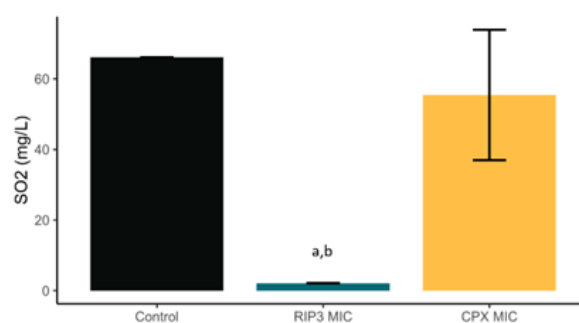


Figure S1. Effect of RIP3 on sulfite formation by *Trichophyton rubrum* ATCC 28188. The results are the means \pm SD from three independent experiments. Significant difference ($p < 0.05$) when compared to drug-free growth control (a) and CPX (b). MIC, minimal inhibitory concentration; RIP3, riparin III; CPX, ciclopirox.