



Antifungal Activity of *Stryphnodendron adstringens* (Mart.) Extracts

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Stryphnodendron adstringens (Mart.) Coville, is a medicinal plant that belongs to Mimosoideae. It is also known as barbatimão. Its aqueous extract has anti-inflammatory and antimicrobial properties [1]. This study was conducted to evaluate the phenols and tannins content and the antifungal activity of the aqueous extract against *Trichophyton rubrum*. A clinical isolate of *T. rubrum* (ATCC-MYA3108) was obtained from a patient admitted to the University Hospital of Ribeirão Preto University, SP, Brazil. The mutant strain *TruMDR2* was obtained from the disruption of the *TruMDR2* gene from isolate MYA3108. Phenol concentrations were determined by colorimetric method and the antifungal potential was determined in bioassays measuring the minimal inhibitory concentration (MIC). The antifungal activity of the extracts was confirmed against *T. rubrum*. The aqueous extract *S. adstringens* contains phenols and tannins and showed a minimal inhibitory concentration (MIC) of 156 µg/mL for both isolates of *T. rubrum* (Table 1), as compared to fluconazole at 75 µg/mL. The fractions were less active than the whole extract suggesting that the activity is related to possible interactions of compounds not due to a specific metabolite, as mentioned by Bezerra et al. [2]. References: [1] Souza C, Felfili J, (2006) *Acta Botanica Brasílica*, 20: 135–142. [2] Bezerra JCB, et al. (2002) *Fitoterapia*, 73: 428–430.

Table 1 Minimal inhibitory concentration (MIC) µg/mL of water extract and fractions of *S. adstringens* against two strains of *Trichophyton rubrum*. (Standard Deviation 6.78).

Isolates	Water extract	Fraction I	Fraction II	Fraction III	Fluconazole
MYA-3108	156	1250	1250	1250	75
TruMDR2	156	312	625	1250	7575