

Antiplasmodial activity assessment of endophytic fungal fractions

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Vol 1, 2022 - 152545

Poster

Abstract

Malaria is a disease caused by the pathogenic protozoa *Plasmodium* spp. of a major global impact on human health.¹ Increasing resistance of *P. falciparum* strains to licensed drugs demonstrates the need to discover new antimalarial candidates. Natural products (NPs) show substantial structural diversity and potent biological activities. Hence, NPs are attractive compounds for the discovery of new antimalarial drug candidates.² In this work, we investigated extracts of growth media produced by 29 endophytic fungal strains isolated from plants collected at the Alcatrazes Island, São Sebastião (SP/BR). Solid-phase extraction (SPE) was applied for the fractionation of EtOAc-soluble extracts. Next, the antiplasmodial activity of SPE fractions was assessed against *P. falciparum*. Several fractions indicated promising inhibitory activity (inhibition > 90 % at 50 µg/mL) of *P. falciparum* growth. Our findings indicated that natural products isolated from endophytic fungal cultures are attractive source for the discovery of new *P. falciparum* inhibitors.

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Keywords

Antiplasmodial Activity

Solid-phase extraction

Fractions

fungal strains