

AN INVESTIGATION OF THE SPONGE *MYRMEKIODERMA* SP. FOR NEW
ANTIMALARIAL DRUG LEADS.

LaTasha D.J Amisial¹, Hilaire V. Kemami Wangun², Debopam Chakrabarti³ and Amy E. Wright^{1,2}

¹Marine Biomedicine and Environmental Sciences, Medical University of South Carolina, Charleston, SC

²Harbor Branch Oceanographic Institute at Florida Atlantic University, Fort Pierce, FL

³University of Central Florida, Orlando, FL

Malaria is a devastating disease caused by infection with a parasitic protozoan of the genus, *Plasmodium*. The two most common forms of *Plasmodium* that infect humans are *Plasmodium vivax* and *Plasmodium falciparum*, with *P. falciparum* infection being the most dangerous. Transmission of the *Plasmodium* parasite is through the mosquito. Currently, forty-one percent of the world's population lives in areas where malaria is endemic, and each year 350-500 million clinical episodes of malaria occur worldwide. Over one million people die from malaria every year, and in regions with extremely high transmission of malaria, two people die per minute. There is emerging drug-resistance in both *P. vivax* and *P. falciparum*, and the discovery of novel chemotypes that inhibit the drug-resistant strains may lead to the development of new, critically-needed medicines. Marine organisms have been the source of many natural products with therapeutic properties. As part of a program to discover novel anti-malarial agents from marine organisms, extracts from the marine sponge *Myrmekioderma* sp. have tested positive for antiplasmodial activity. Presented here is a natural products investigation into the chemistry of the sponge *Myrmekioderma* with the goal of identifying the antiplasmodial natural products.

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