

# Fucoxanthin, Tetraprenylated Toluquinone and Toluhydroquinone Metabolites from *Sargassum heterophyllum* Inhibit the *in vitro* Growth of the Malaria Parasite *Plasmodium falciparum*

Anthonia F. Afolayan<sup>a</sup>, John J. Bolton<sup>b</sup>, Carmen A. Lategan<sup>c</sup>, Peter J. Smith<sup>c</sup>, and Denzil R. Beukes<sup>a,\*</sup>

<sup>a</sup> Division of Pharmaceutical Chemistry, Faculty of Pharmacy, Rhodes University, Grahamstown, 6140, South Africa. Fax: +27466361205. E-mail: d.beukes@ru.ac.za

<sup>b</sup> Department of Botany, University of Cape Town, Private Bag, Rondebosch, 7701, South Africa

<sup>c</sup> Division of Pharmacology, University of Cape Town, Observatory, 7925, South Africa

\* Author for correspondence and reprint requests

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In the course of our search for antimalarial leads from marine algae, four metabolites, sargaquinoic acid, sargahydroquinoic acid, sargaquinal and fucoxanthin, were isolated from the South African alga *Sargassum heterophyllum*. Fucoxanthin and sargaquinal showed good antiplasmodial activity toward a chloroquine-sensitive strain (D10) of *Plasmodium falciparum* (IC<sub>50</sub> 1.5 and 2.0  $\mu\text{M}$ , respectively), while sargaquinoic acid and sargahydroquinoic acid were only moderately active (IC<sub>50</sub> 12.0 and 15.2  $\mu\text{M}$ , respectively).

**Key words:** Antiplasmodial Activity, Fucoxanthin, Sargaquinal