



Antiplasmodial and cytotoxic activities of flavonoids and arylbenzofuran derivatives from *Morus mesozygia*

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Résumé en anglais	<p><i>Morus mesozygia</i> Stapf (Moraceae) is a plant found in many regions and used in treating many diseases including malaria and fever. Fractionation of the methanolic extract of its stem bark, using various chromatographic methods has led to the isolation and identification of 3 flavonoids: artocarpesin, artochamin C and kushenol E. And 4 arylbenzofuran derivatives: moracin M, moracin C, moracin L and mulberofuran F. The methanolic extract and the seven isolated compounds were tested for antiplasmodial activity against the chloroquine-resistant FcB1 <i>Plasmodium falciparum</i> strain and cytotoxicity on MCF-7 human breast cancer cells. Relating to the antiplasmodial activity, it was found that all compounds were active against the FcB1 strain of <i>Plasmodium</i> with artocarpesin, koushenol E and mulberofuran F showing particular potency (with the median inhibitory concentrations $IC_{50} = 2.5-2.6 \mu\text{g/ml}$). Cytotoxicity tests performed on MCF-7 cells revealed all the IC_{50} varying from <1.0 to $5.0 \pm 0.6 \mu\text{g/mL}$. A structure - activity relationship is discussed.</p>
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