

**Isolation and Structural
Identification of Molluscicidal
Compounds from
Leaves of *Pittosporium tobira***

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ABSTRACT

The objective of this work was to extract and isolate the active molluscicidal compound(s) from the leaves of *Pittosporum tobira* as this plant met the selection criteria proposed by WHO for viable plant molluscicides.

The isolation was carried out by using a combination of different chromatographic methods (TLC and column chromatography). The purity of the isolated compound was established by its resolution as a single spot in four different TLC systems. The biological evaluation of the extracts and isolated compound(s) was carried out against *Biomphalaria alexandrina* snails. The greater part of the molluscicidal activity of the air dried leaves of *Pittosporum tobira* was a methanolic extract. The purified saponin from methanolic extract was characterized by chemical methods (detection tests, acidic hydrolysis and acetylation of isolated compound) and spectroscopic methods GC-MS and ^1H , ^{13}C NMR.