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Sandaracopimaradiene-7 $\alpha$ ,18-diol

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## Active Principles of *Tetradenia riparia*. IV. Anthelmintic Activity of 8(14),15-Sandaracopimaradiene-7 $\alpha$ ,18-diol

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### Abstract:

#### *Ethnopharmacological relevance:*

*Tetradenia (T.) riparia* (Hochst.) Codd (Lamiaceae), formerly known as *Iboza riparia* (Hochst.) N.E.Br., is one of the most frequently used medicinal plants in traditional Rwandese medicine. It was used as a remedy against a wide range of diseases including malaria, angina, yaws, dental abscesses, headache, worm infections and several kinds of fevers and aches.

#### *Aim of the study:*

This study aims to identify the compounds active against helminths from *Tetradenia riparia*.

#### *Methods:*

A bioassay-guided isolation of anthelmintic compounds from the leaves of *Tetradenia riparia* was performed using a *Caenorhabditis elegans* (*C. elegans*) testing model.

#### *Results:*

The bioassay-guided isolation led to one active compound, i.e. 8(14),15-sandaracopimaradiene-7 $\alpha$ ,18-diol. Its IC<sub>50</sub> value was 5.4  $\pm$  0.9  $\mu$ g/mL (17.8  $\pm$  2.9  $\mu$ M).

#### *Conclusions:*

We identified the bioactive compound from *Tetradenia riparia* responsible for its anthelmintic activity: 8(14),15-sandaracopimaradiene-7 $\alpha$ ,18-diol. Although the compound and several of its bioactivities have been described before, this is the first report of its anthelmintic effect.

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