Toxicity evaluation in *Artemia salina* of the essential oil of Pataqueira (*Conobea coparioides* Cham. & Schltdl) Benth

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The essential oils (EO) are important raw materials extracted from various plants. Usually, EO have pharmacological potential for cosmetics and industry. *Conobea scoparioides* is popularly known as "pataqueira", an aromatic plant native to Amazon rainforest which grows wild in semi-flooded areas, widely used by folkmedicine in aromatic baths and in the treatment of beriberi (1). *Artemia salina* is a microcrustacean species of Anostraca Order, used in many works as a toxicity biomarker. This study aimed to evaluate the toxicity of essential oils obtained from the whole fresh and dry material of *C. scoparioides* in *A. salina*. The plant material was collected in March 2015, in the municipality of Santarém- Pará, and 400 g of the material was dried in an oven at 40 °C for 48 h. EO extraction was performed in a Clevenger type apparatus for 3 h, through the standard methodology of hydrodistillation, being used 150 g of the whole dried plant material and 300 g of the whole fresh material. Chemical analysis was performed by gas chromatography coupled with to a mass spectrometer (GC/MS). The bioassay with *A. salina* was held as adapted from Meyer et al (2). The concentrations used were: 1, 10, 100 and 1000 µL mL^{-1}. The bioassay was performed in triplicate. The count of the nauplii was performed after 12 h. Comparative analysis between the treatments employed the statistical software PRISM (version 3.0) to determine the LD50 (lethal dose to 50 % of test organisms). The degree of toxicity was classified according to mortality: 0-9 % = not toxic; 10-49 % = slightly toxic; 50-89 % = toxic; 90-100 % = highly toxic. The EO of *C. scopariodes* presented the following major constituents for the whole plant dry (PS) and fresh (PF): methylthymol (35 %; 28 %) and thymol (60 %; 69 %), respectively. At concentrations of 100 and 1000 µL mL^{-1}, EO from dried plant mortality rate was 100 %; in 1 and 10 µL mL^{-1}, the mortality rate was 33 and 73 %, respectively. For the fresh plant, only 1000 and 100 µL mL^{-1}presented 100 % mortality rate, while with 10 µL mL^{-1}, 50 % lethality was found, and at 1 µL mL^{-1}, 33 % of lethality was observed. The high toxicity is directly related to variations of the content of the major components thymol and methylthymol, which are considered toxic compounds, allowing the conclusion that EO of "pataqueira" has high toxicity in both dried and fresh plant.

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2. Meyer, B. N. et al. Planta Medica. 1982, **45**, 31-34.

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