



Phytochemical evaluation of essential oil of Pataqueira (*Conobea scoparioides* Cham. Schltidl) from Santarém, Pará, Brazil.

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Conobea scoparioides Cham. & Schltidl (Scrophulariaceae), known as "pataqueira", is an herbaceous aromatic plant occurring in the bed of small streams and wet land of the Amazon region. It is used locally as a fragrance in baths, and to treat "beriberi" (1). The objective of this study was the identification of the chemical compounds present in the essential oil of *Conobea scoparioides* from dry and fresh plant material. Plant material was collected from its natural habitat, in Santarém – PA and separated in two samples. One was dried (48 h at 50 °C in heating oven) and the other used fresh. The samples were subjected separately to hydrodistillation in a Clevenger type apparatus for 3 h. Essential oils were analyzed in CPQBA - Unicamp in an Agilent GC-MS system, using an HP-5MS (30 m X 0.25 mm X 0.25 µm) capillary column, with injector at 220 °C, detector at 250 °C, oven at 60 °C, 3 °C min⁻¹ to 240 °C (20min). Helium was the carrier gas (1.0 mL min⁻¹). Compounds were identified by comparison with the NIST-05 library and the calculated retention indices with literature data. The yield of the oils were 1.3 and 0.2 % for the dried and fresh materials, respectively. Five compounds were identified in the essential oil from the dried sample: thymol (59.9 %), methylthymol (34.6 %), α-phellandrene (3.4 %), 3-octanone (1.2 %) and *p*-cymene (0.7 %) and seven compounds from the fresh sample: thymol (68.3 %), methylthymol (27.5 %), α-phellandrene (1.7 %), 3-octanone (1.1 %), *p*-cymene (0.4 %), eugenol (0.4 %) and linalool (0.2 %). Thymol, methylthymol and α-phellandrene were major constituents in both samples analyzed. Differences in percentage of the chemical composition of the essentials oils in dry and fresh material were observed. Methylthymol and α-phellandrene percentage increased when the material was subjected to drying (27.5 % and 1.7 % for fresh; 34.6 % and 3.4 % for dried, respectively). Moreover, thymol showed a decrease in their content when comparing fresh sample with dried sample (68.3 % for fresh; 59.9 % for dry). According to studies by Venskutonis (2), the loss of volatile constituents in herbs and spices depends mainly on the type of drying and biological characteristics of plants. Based on the assessment of dried and fresh plant material, it was concluded that no influence on the content and chemical composition of essential oil *Conobea scoparioides* was observed.

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2. Venskutonis, P.R. Food Chem., 1997, **59**, 219-227.

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