Olfatory and chemical caracterization of the Essential Oil from *Bidens graveolens* Mart.

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Bidens graveolens (Asteraceae) is found in Brazilian Cerrado, an important biome experiencing pronounced degradation mainly due to cattle raising. Antioxidant and antimicrobial activities are described in the essential oils from plants of this genus, along with pleasant aromas.[1,2] The aim of this work was to identify and quantify the volatile compounds present in the essential oil from *Bidens graveolens* leaves using gas chromatography quadrupole MS (GC-qMS) and GC-FID (with the help of LRI), respectively, together with its aroma analysis by gas chomatography/mass spectrometry – olfatometry (GC-MS-O). The essential oil was obtained by hydro-distillation in a Clevenger-type apparatus for 2 h, leading to 0.25% yield. Hydrocarbon monoterpenes are the major compounds, as α-pinene (18,0%), *β*-pinene (14,7%), myrcene (2,2%), *o*-cymene (2,0%) and limonene (47,7%). The first three substances showed to be important to its aroma, described as fresh, camphoraceous and fruity. Although in minor amounts, oxygenated monoterpenes play an important role in olfatometry and seems to be responsible for the balsamic, citrus, woody, herbal, green and camphoraceous aroma. Although GC x GC led to few coelutions, it helped with minor compounds identification, mainly the oxygenated mono and sesquiterpenes, the last present in very low amounts.

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