



Essential oil yield from three genotypes of *Mikania laevigata* grown in organic system

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In Brazil, the species *Mikania laevigata* is widely used due to antiallergic, antispasmodic, anti-inflammatory, anti-ulcer, antimicrobial, bronchodilator and relaxing smooth muscles properties (1). The influence of genetic (2) and environmental (3) variations in the secondary metabolites of plants may have implications on their biological effects. The secondary metabolites identified in *M. laevigata* are: essential oils, stigmasterol, hydrolysable tannins, flavonoids, saponins and coumarin with pharmacological properties described in the literature (4). The essential oil extracted from the leaves of *Mikania* genus presents antimicrobial activity (5). This work aimed to evaluate the essential oil yield in *M. laevigata* genotypes cultivated at organic system. Herbarium specimens of three genotypes (Embrapa, CPQBA and Unaerp) were incorporated into the Herbarium PAMG under the numbers 57032, 57033 and 57031, respectively. The cuttings were rooted and transplanted in a 2 x 1 m spacing at the Experimental Research Station of EPAMIG, Oratórios-MG, Brazil. The leaves were separated of stems, weighed and dried in an oven with forced air circulation (40 °C) to constant weight. Dried leaves (100 g) were subjected to hydrodistillation separately in a Clevenger-type apparatus for 6 h each. Embrapa (0.30 %) and CPQBA (0.28 %) genotypes presents significantly higher essential oil yield than Unaerp (0.19 %). The essential oil yield depends on the genotype and environment interaction.

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