
OP-15 Essential oils yield and composition of Myrtaceae species from Atlantic Forest of South Brazil

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Abstract

Myrtaceae is one of the largest botanical families occurring in Brazil mainly in the Atlantic Forest and it is recognized by its great potential for volatile oil production of economic interest. This work aimed to evaluate the essential oil yield and chemical composition of Myrtaceae species with occurrence in a preservation area of the Atlantic Forest in Parana state, Southeast of Brazil. The essential oil extraction was carried out by hydrodistillation of fresh and dried leaves and the chemical composition was determined by gas phase chromatography coupled with flame ionization and mass detectors. The following species were evaluated: *Myrciaria delicatula*, *Campomanesia xantocarpha*, *Campomanesia aurea*, *Calypttranthes clusiifolia*, *Myrcia splendens*, *Eugenia osoriana*, *Myrciaria tenella*, *Myrceugenia reitzii*, *Calypttranthes concinna* and *Myrcia arborensis*. The *Myrceugenia reitzii* showed essential oil yield of 1.59%, being superior to the other species. The average essential oil yield for each species studied was higher when using dried instead of fresh plant material. The chemical composition showed sesquiterpenes in a high percentage. The drying process affected the chemical composition of the essential oil for most species.

Keywords: Atlantic Forest, medicinal and aromatic plants, terpenes, spathulenol.

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