

***Eucalyptus globulus* Labill. and other eucalyptus species**

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Abstract

The genus *Eucalyptus*, comprises more than 700 species, many of them used for the production of timber, pulp, as well as essential oils, that are of great use in the pharmaceutical and perfumery industries. 1,8-Cineole-rich (eucalyptol) *Eucalyptus* essential oils are particularly valued for their antimicrobial and antiseptic properties, being commonly used to alleviate breathing problems. The essential oils isolated from the leaf of 20 *Eucalyptus* species, collected at Mata Experimental do Escaroupim, were obtained in yields that ranged from 0.1-5.6% (v/f.w.). 1,8-Cineole was the main component (22-83%) of the essential oils isolated from 14 of the studied species [*E. bosistoana*, *E. botryoides*, *E. camaldulensis*, *E. cinerea*, *E. × cordieri*, *E. globulus*, *E. macarthurii*, *E. moluccana* (= *E. hemiphloia*), *E. piperita*, *E. polyanthemos*, *E. radiata*, *E. saligna*, *E. smithii* and *E. viminalis*]. *E. urophylla* and *E. globulus* subsp. *globulus* (= *Eucalyptus gigantea*) essential oils differed from the remaining ones on being α -phellandrene (45%) and limonene (36%) rich, whereas those of *E. pauciflora* and *Corymbia ficifolia* (= *E. ficifolia*) were α -pinene rich (44-94%). *E. dives* and *Corymbia citriodora* (= *E. citriodora*) essential oils showed, high percentages of piperitone (40-55%) and citronelal (36-47%), respectively.