# Eucalyptus camendulensis and Its Drying Effect on Water and Essential Oil Content 


#### Abstract

Authors : Mehani Mouna, Segni Ladjel Abstract : Medicinal and aromatic plants are promising and are characterized by the biosynthesis of odorous molecules that make up the so-called essential oils (EO), which have long been known for their antiseptic and therapeutic activity in folk medicine. The objective of this study was to evaluate the influence of drying in the shade on the water content and on the content of essential oils extracted from leaves of Eucalyptus camendulensis for better quality control of medicinal and aromatic plants. The water content of the Eucalyptus camendulensis plant material decreases during the drying process. It increased from $100 \%$ to $0.006 \%$ for the drying in the shade after ten days. The moisture content is practically constant at the end of the drying period. The drying in the shade increases the concentration of essential oils of Eucalyptus camendulensis. When the leaves of Eucalyptus camendulensis plant are in the shade, the maximum of the essential oil content was obtained on the eighth days; the recorded value was $1.43 \% \pm 0.01 \%$. Beyond these periods, the content continuously drops in before stabilizing. The optimum drying time is between 6 and 9 days.


Keywords : Eucalyptus camendulensis, drying, essential oils, water, content
Conference Title : ICCEBE 2015 : International Conference on Chemical, Environmental and Biological Engineering
Conference Location : Berlin, Germany
Conference Dates : September 14-15, 2015

