
P-05 Essential oil composition from hop cultivated at Southern Brazil

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Abstract

Hop has economic importance around the world mainly because of the use by the brewery companies. Although the hop production in Brazil is incipient, the cultivation has grown and the evaluation of genetic materials adapted to the Brazilian environmental conditions is needed. The main objective of this work was to evaluate the cone aromatic profiles of hop grown in Southern Brazil. Mature cones of hop cultivated in two regions of São Paulo state were harvested and the essential oil samples extracted by hydrodistillation and analyzed by gas chromatography-mass spectrometry. The results of the volatile fraction of all samples showed myrcene (10.79-16.29%) and α -humulene (22.7-29.47%) as the main constituents. β -selinene (10.79-11.99%) and γ -muurolene (9.96-10.73%) were also identified in all of the evaluated samples. The results showed that phytochemical variability among the samples according to the different environmental conditions. The improvement of the variability of the genetic materials adapted to different regions could result on increase of cultivated areas in the country.

Keywords: *Humulus lupulus* L., chemical diversity, aromatic profile, myrcene, humulene, β -selinene, γ -muurolene.

Volume 4, Issue 3, 2017

ISSN: 2148-9637

NATURAL VOLATILES & ESSENTIAL OILS

A Quarterly Open Access Scientific Journal

ABSTRACTS

ISE
2017



48th International Symposium on
Essential Oils

Pécs, Hungary

10-13 September 2017

NVEEO

Publisher: BADEBIO Ltd.

Final Programme & Book of Abstracts

48th International Symposium on Essential Oils (ISEO2017)

Final Programme & Book of Abstracts

10-13 September 2017, Pécs, Hungary

The professional and grammatical level of the materials is the authors' responsibility.

Printed in Hungary - 2017

OOK-Press Ltd., Veszprém, Hungary

Responsible for printing: Attila Szathmáry