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**“Food science and technology  
in a changing world”**

**FOODBALT 2017**

**Abstract Book**

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**INFLUENCE OF RAW-MATERIAL IN THE FRUIT LIQUOR PREPARATION****Ofelia Anjos<sup>1,2</sup>, Daniel Lopes<sup>1</sup>, Teresa Delgado<sup>3</sup>, Sara Canas<sup>4,5</sup>, Ilda Caldeira<sup>4,5</sup>**<sup>1</sup>Instituto Politécnico de Castelo Branco, 6001-909 Castelo Branco, Portugal<sup>2</sup>Centro de Estudos Florestais, Instituto Superior de Agronomia, Universidade de Lisboa, 1349-017 Lisboa, Portugal<sup>3</sup>Centro de Biotecnologia de Plantas da Beira Interior, 6001-909 Castelo Branco, Portugal<sup>4</sup>Instituto Nacional de Investigação Agrária e Veterinária INIAV - Dois Portos, Quinta da Almoinha, 2565-191 Dois Portos, Portugal<sup>5</sup>ICAAM – Instituto de Ciências Agrárias e Ambientais Mediterrâneas, Universidade de Évora, Polo da Mitra, 7002-554 Évora, Portugal

Fruit liqueur is an alcoholic beverage obtained by mixing alcohol, sugar and fruits. The final quality of this beverage depends on the appropriate combination of its components. According to the legislation (EC Regulation No. 110/2008), this type of product must contain a minimum alcoholic strength by volume of 15% and a minimum sugar content of 70 to 100 g dm<sup>-3</sup>, variable with the type of fruit.

In this work the influence of distillate types (grape marc spirit or wine spirit), sweetener (sugar or honey) and fruit quantity were studied for blueberry liqueur preparation.

To evaluate the characteristics of different produced beverages, alcoholic strength, dry matter, total acidity, fixed acidity, volatile acidity, pH, chromatic characteristics, methanol, acetaldehyde, fusel alcohols and ethyl acetate concentration were determined.

According to the factorial ANOVA results, three studied factors significantly influenced the physicochemical composition of the liqueurs, and the quantity of fruit was the most discriminating factor, except the CIELAB colour and reducing sugar. The kind of distillate used in the different produced beverages influenced significantly the volatile composition of the final product.

**Keywords:** liqueur, distillate, sweetener, fruit quantity, physicochemical characterization

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