II INTERNATIONAL SYMPOSIUM ON SCIENCE AND BIOTECHNOLOGY ENTREPRENEURSHIP AND INNOVATION

PHYTOCHEMICAL PROFILE AND BIOLOGICAL ACTIVITY USING ISABEL GRAPE (VITIS LABRUSCA L.) RESIDUE EXTRACT

1HOLLAS, FERNANDA FARIAS; 2ANDRADE, LUCAS BERTAIOLLI; 3*LOCATELLI, CLAUDRIANA.

1. Graduanda do Curso de Engenharia Quimica Universidade do Oeste de Santa Catarina -Campus Videira.

2. Mestrando do Programa de Pós Graduação em Ciência e Biotecnologia da Universidade do Oeste de Santa Catarina - Campus Videira.

3. Doutora Professora da Universidade do Oeste de Santa Catarina - Programa de Pós Graduação em Ciência e Biotecnologia - Campus Videira.* correspondence author

Financial Support: Artigo 170 Governo Estado de Santa Catarina

Abstract

The grape residual presents high level of active substances composition, characterizing it as a product that the industry could use more efficiently in a better profitable way, in the formulation of beauty goods and food. The goal of this research was to evaluate the phytochemical profile and biological activity of the Isabel Grape residue. In order to obtain the extracts, it was used the method of trituration in different solvents (water, ethanol, methanol, and a hydroalcoholic mixture). Colorimetric tests used showed the phytochemical profile. The technique of Folin-Ciocalteu evaluated the content of total phenol and the method of AlCI3 evaluated the total flavonoids. As for the biological activity, the antioxidant activity was evalueted by the method of DPPH, the inhibition of auto-oxidation of β -carotene/linoleic acid and the ability of metallic ions sequestration. The spectrophotometric reading obtained the photoprotection factor (SPF). The results showed that the hydroalcoholic extract presents a great phenols and flavonoids quantity that could relate with the extract antioxidant and photo protective activity. This

Programa de Mestrado Acadêmico em Ciência e Biotecnologia

II INTERNATIONAL SYMPOSIUM ON SCIENCE AND BIOTECHNOLOGY ENTREPRENEURSHIP AND INNOVATION

extract presented a SPF as 1.87 and a good antioxidant by the used methods. The results showed that the Isabel Grape residue hydroalcoholic extract presents a great biotechnological potential.

Keywords: Grape residue. Antioxidant potential. Photo protection. fernanda.fariash@hotmail.com; claudriana.locatelli@unoesc.edu.br

Programa de Mestrado Acadêmico em Ciência e Biotecnologia