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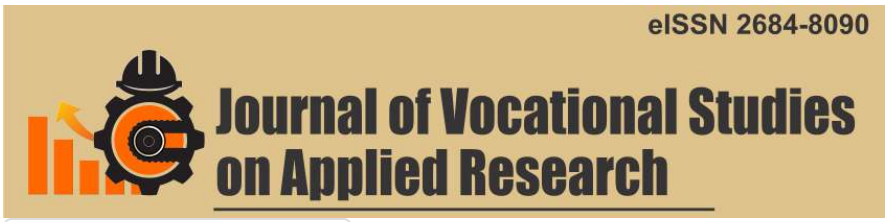

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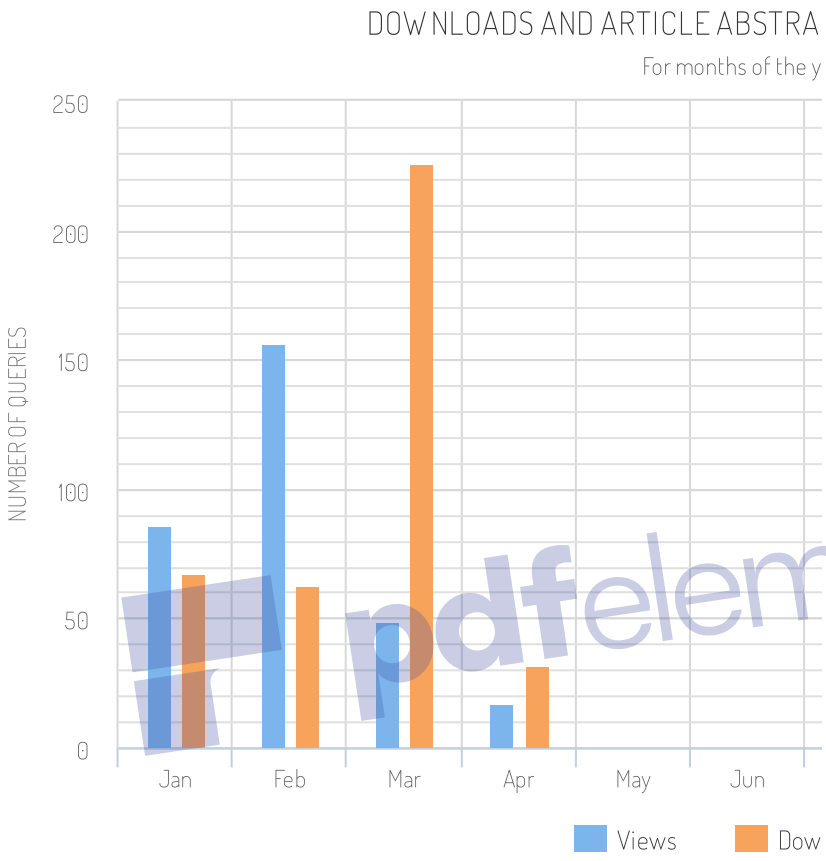

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SM Pourmortazavi , SS Hajimirsadeghi - Journal of chromatography A, 2007 - Elsevier
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Supercritical carbon dioxide and **subcritical** water: Complementary agents in the processing of functional foods

K Srinivas, JW King - Functional food product development, 2010 - Wiley Online Library
…In order to **optimize** the SC-CO2 **extraction** of such solutes from spice matrices, the …in Figure 3.9 refers to the smallest sphere formed by the computerized **optimization** method for …The **optimized** temperature for the solubility maxima of malvidin-3O-glucoside in the solvent is …
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Supercritical **fluid extraction** of plant flavors and fragrances

A Capuzzo , ME Maffei, A Occhipinti - Molecules, 2013 - mdpi.com
…The presence of water as pretreatment of plant material or added to CO 2 at supercritical and **subcritical** state as a co-solvent has shown to …2. Supercritical **Fluid Extraction** of Flavors …Therefore, supercritical **fluids** are attractive for **extracting** flavors present in natural materials …
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MSM Sarip - Universiti Teknologi Malaysia, Malaysia, 2012 - eprints.utm.my
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MC Mesomo, A de Paula Scheer, E Perez …- …of Supercritical **Fluids**, 2012 - Elsevier
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C Grosso, P Valentão, F Ferreres, PB Andrade - Marine Drugs, 2015 - mdpi.com

…The use of supercritical **fluids** is an alternative **extraction** technique that produces extracts with none or …than the T c and Pc of the solvents, leading solvents to keep the **liquid** state …such as propane and dimethyl ether (DME), can also be used for **subcritical fluid extraction** [46,64 …

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Techno Economic Modelling of Dried Black Potato (Plectranthus rotundifolius)

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Abstract

The techno economic modeling of dried black potato (*Plectranthus rotundifolius*) was studied by employing electrical cabinet oven. The parameters investigated were including parameter obtained from analysis of capital budgeting, breakeven point and ž nancial ratio of rentability. The obtained payback period was 2 years 11 months by investing 53.000.000 rupiah for machinery and 10.000.000 rupiah for start-up cost as initial capital. By assuming 10 years of dried black potato production, the value of net present value was equal to 1.207.982.611 rupiah. The value of gross prož t margin and net prož t margin were 0.97 and 0.87, respectively. Regarding to the positive value of net present value, the lower payback period value, and the high value of internal rate of return (74.47 and also the prož tability index (20.17), the modeling of techno economic was positively recommending the commercial application of dried black potato by using electrical cabinet oven.

Note: This article has supplementary ž le(s).

Keywords: engineering; economic; social; political science

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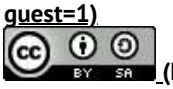

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Economic Factor on the In Situ Vanillin Enz y matic Formation from the Green Pods Vanilla

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Abstract

This work proposed a study of a direct enzymatic of vanillin formation by using rumen liquid which has enzymatic capability for tissue disruption of vanilla green pods to avoid the curing process. Application of enzymes during the formation of vanilla aromas and its extraction present nice opportunity to improve productivity, as the enzymatic reaction possibly substitute the microbial process in the traditional fermentation. Green vanilla pods were applied for the direct enzymatic extraction of vanillin, while liquid rument provide cell wall degrading enzyme in order to support the hydrolysis process (destruction) of cell wall. Glucovanillin were contacted with the β-glucosidase in the green pods due to the desruction of the cell wall, followed by the formation of glucovanillin into vanillin. Vanillin content of vanilla green pods was found higher in which by treating the vanilla green pods at 30 ° C.

Note: This article has supplementary ž le(s).

Keywords: engineering; economic; social; political science

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