Journal of
Materials Engineering and Applications

Abstract

Optimization of the extraction yield of plant waxes by the development of experimental designs

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Abstract:
Fruits peel of mangifera indica and the leaves of the borassus aethiopum are new sources of waxes not exploited industrially. The main extraction yield parameters were optimized using response surface methodology. It is so important to maximize the extraction yield of mangifera indica and borassus aethiopum in order to better exploited those resources. In fact, a screening design have been realized according to PlackettBurman method. The results of tests conducted in optimal conditions, showed a significant increase in extraction yield for both models. The analysis of products by thin layer chromatography showed that the main compounds of waxy extracts are alkanes, alkenes, squalene and sterolester. The presence of others tasks such as free fatty acids, diglycerides, phospholipids, monoglycerides, sterols and others compounds of unknown nature show as well that the plant waxes of this study are of lipids of complex composition like the majority of plant waxes met in the literature

Biography:

Hermann Boris Djedje Badie is a young student in chemistry, he holds a BSc in Industrial Chemistry and currently pursuing a Master degree in Chemistry and Physico-Chemistry of Natural Substances at Nangui Abrogoua University (Ivory Coast).

After to have completed his undergraduate studies, Hermann has worked in a laboratory of research as analyst during one year. His mission was to make the quality control of water and food products. Hermann is a passionate to research in chemistry so his professional project is to be a Doctor in chemical engineering and also create his own laboratory of research

Webinar on Industrial Chemistry; October 25, 2020; Paris, France.

Citation: Hermann Boris Djedje Badie; Optimization of the extraction yield of plant waxes by the development of experimental designs; Industrial Chemistry Webinar; October 25, 2020; Paris, France.