ECO-FRIENDLY EXTRACTION AND SEPARATION METHODS OF CAPSAICINES

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Abstract

The selective alcoholic extraction, isolation and characterisation of capsaicinoids from chilli were studied. The paper describes the capsaicin alcoholic extraction, isolation and characterisation by analytic methods (Thin Layer Chromatography - TLC, High Performance Liquid Chromatography – HPLC, mass spectroscopy - MS and UV-VIS spectroscopy). The studies regarding the capsaicin extraction and separation approaches are applied to assess the chemical and biological process engineering for obtaining some natural compounds valuables in different domains: medical, pharmaceutical, food industry. The future studies of Capsicum are very promising, especially for the new hybrids developed by tissue culture and biotechnology methods. Their high content of capsaicin with bright red colour will provide a cheap available source of valuable ingredients for industrial uses.

Key words: alcoholic extraction, capsaicinoids, oleoresin, HPLC chromatography

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