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## 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, capsaicinoides, oleoresin, HPLC chromatography

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