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New metabolomics approach for natural products research

Natural products stand out in the search for new drugs leads, mainly due to the abundant structural variety of compounds. This search occurs for many years classically, which involves extractions and chromatographic separation, allowing only the isolation of the majority compounds. Although the success, along the years, a decrease in the number of new molecules discovered was observed. Since then, we observed an increasing number of articles that use metabolomics to accelerate the discovery of new compounds, applying hyphenated techniques as HPLC-MS and statistical approach. This strategy avoids the isolation of known compounds, allow the identification of patterns of distribution of secondary metabolites, assists in the understanding of species evolution and the identification of compounds responsible for biological activity in plant extracts without the necessity of isolation and re-evaluations.