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LC/MS Approaches For the analysis of Non-Polar Natural Products Extracts

LC/MS is a well-established technique for Natural Products analysis, which allows the detection and characterization of complex plant extracts with minimum sample preparation. The most common approach is based on reverse phase liquid chromatography coupled with mass spectrometry (LC/MS), using Electrospray ionization. This technique is suitable for polar compounds, but had limitations for non-polar compounds, mainly semi and non-volatile compounds that cannot be analyzed using GC/MS. In this work we evaluated different approaches to reach those compounds, including different solvents for reverse phase chromatography and Supercritical Fluid Chromatography, as well as different ionization sources.