

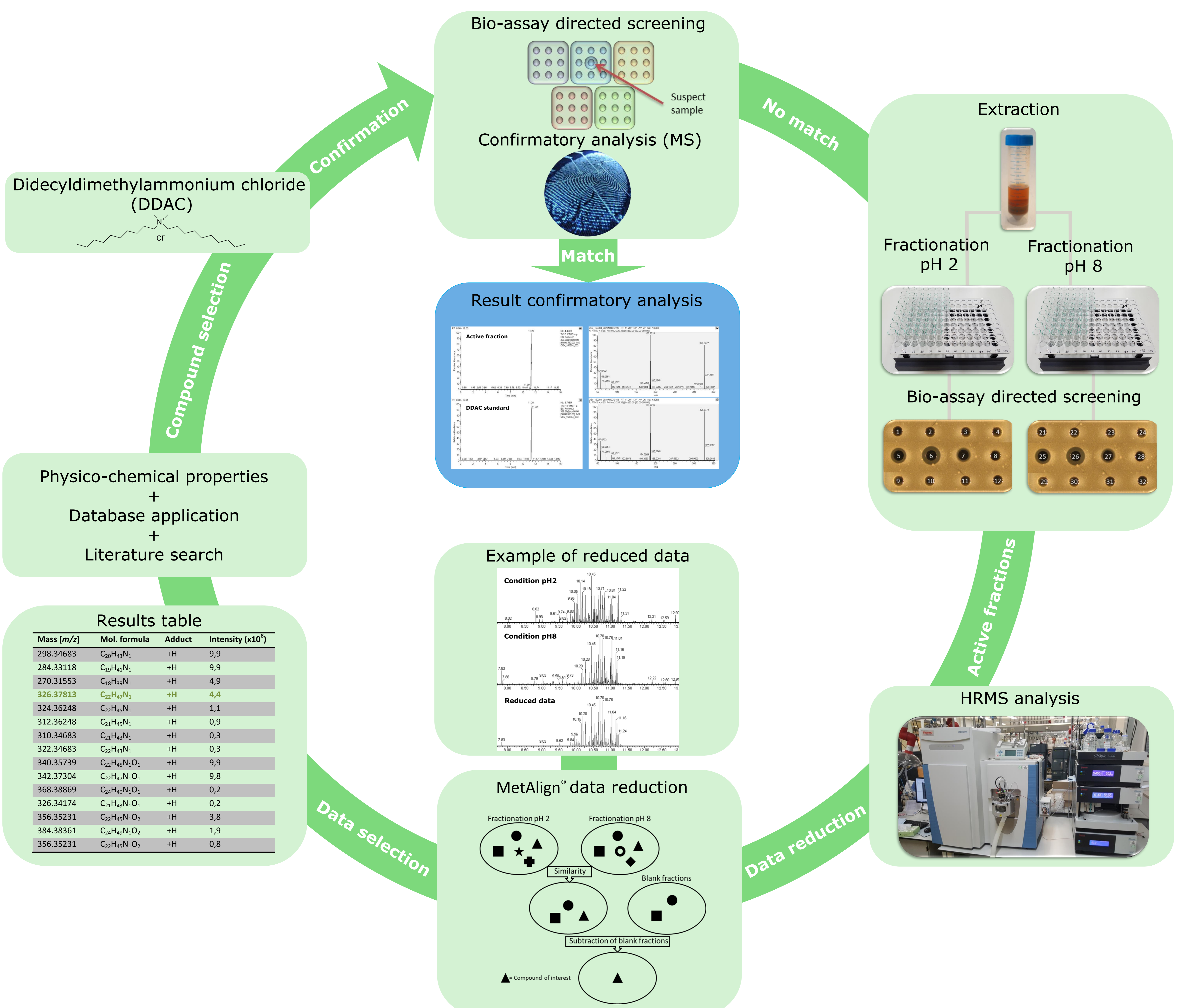


Non-targeted analysis of bio-active compounds using bioassay directed screening and LC-HRMS

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Introduction

We developed a true non-targeted analysis method for the identification of bio-active compounds in feed, using bio-assay directed screening and LC-HRMS analysis. The method was assessed with two spiked samples and applicability was demonstrated using a feed additive that contains a previously unidentified compound responsible for growth inhibition. In all cases, the compound causing microbiological inhibition was successfully identified and confirmed. Here we present the approach showing the feed additive as an example.



Conclusions

The combination of an effect based bio-assay, HRMS and intelligent data processing by matching two different LC fractions is a strong tool in the identification of bio-active compounds in feed.

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