



Secondary Metabolites

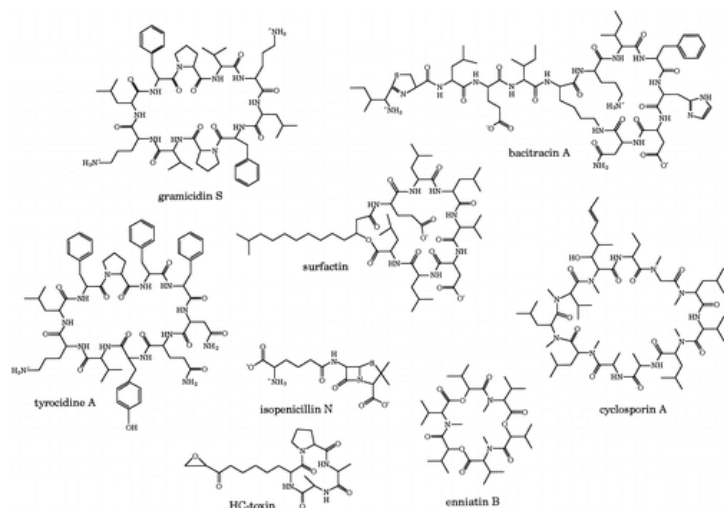
As secondary metabolites are produced with the purpose to confer a selective advantage of the host organism they are an excellent source of novel bioactive compounds with great therapeutic potential for e.g. anti-biotics, anti-viral drugs and biological fungicides.

BACKGROUND

Identifying bioactive compounds in complex biological samples such as plant or fungal extracts is a challenging task, traditionally tackled with large scale extraction followed by extensive fractionation and purification of active ingredients from active fractions by crystallization and x-ray crystallography. However, modern OMIC approaches allow identification of active ingredient candidates directly in complex samples from minute amount of extracts.

TECHNOLOGY

We employ hydrophobic interaction liquid chromatography high resolution ion mobility mass spectrometry to identify differences between biologically active and inactive extracts in an untargeted manner. Candidate compounds can be classified into pre-existing compound classes according to their hydrophilicity, sum formula, collisional cross section and fragmentation mass spectra.



OFFER

Under protection of a CDA/NDA we provide you with professional strategies to identify secondary metabolites in complex biological samples. IP developed in this project to be negotiated.

EXPERT:

Dr. Matthias Schittmayer-Schantl

AVAILABLE FOR:

- Joint Research Projects
- Contract Research

DEVELOPMENT STATUS:

Technology Readiness Level 2
(Technology Concept Formulated)

IPR:

Can be generated for our industrial partners / investors

KEYWORDS:

Secondary Metabolites
Identification of active ingredient
Structural elucidation
Non-ribosomal peptides

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