

97TH ADVISORY FORUM
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EFSA COMPENDIUM OF BOTANICALS: OVERVIEW AND AREAS OF APPLICATION

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EFSA COMPENDIUM OF BOTANICALS - INTRODUCTION

- The Compendium of Botanicals is an open-source database –published on EFSA’s website– with data supporting **hazard identification** of botanicals and botanical preparations and is used by EFSA, food manufacturers, other risk assessors and risk managers.
- EFSA’s Botanicals WG has now updated the database with **new information on botanicals** reported to be used in the EU as food, including food supplements, and feed obtained from an **extensive literature review**.
- Moreover, ***in vitro* and *in vivo* toxicity data** of substances of potential concern present in the plants have been obtained from a separate **extensive literature review**.
- In addition to toxicity data, also **QSAR predictions** were generated by three state-of-the-art QSAR model platforms (VEGA-Hub, Danish EPA QSAR and T.E.S.T.).

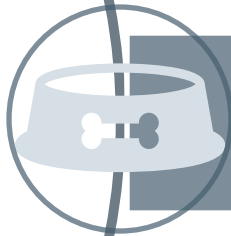


COMPENDIUM OF BOTANICALS – APPLICATIONS

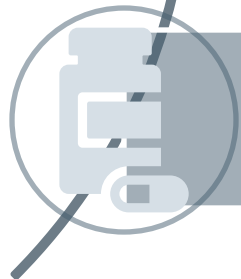
- ✓ Botanical materials/extracts contain numerous substances - some of which may be harmful to health
- ✓ Botanicals, being of natural origin does not mean safe



Novel foods



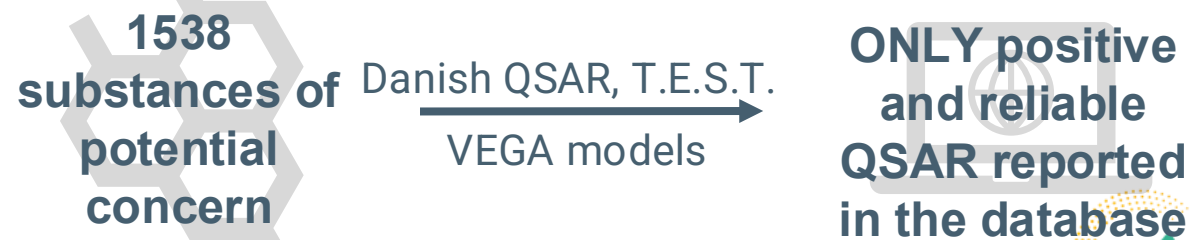
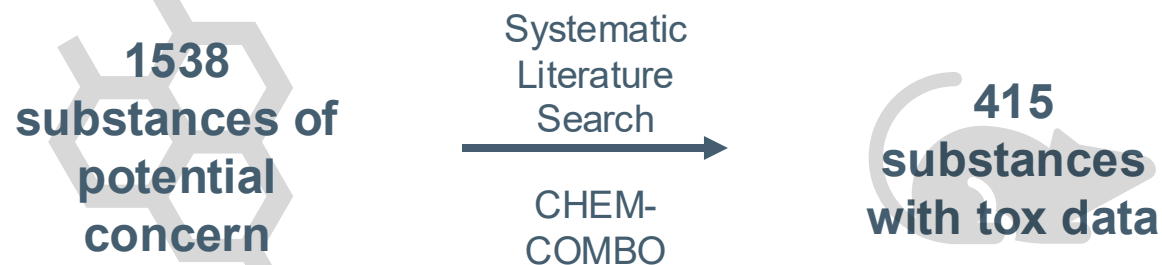
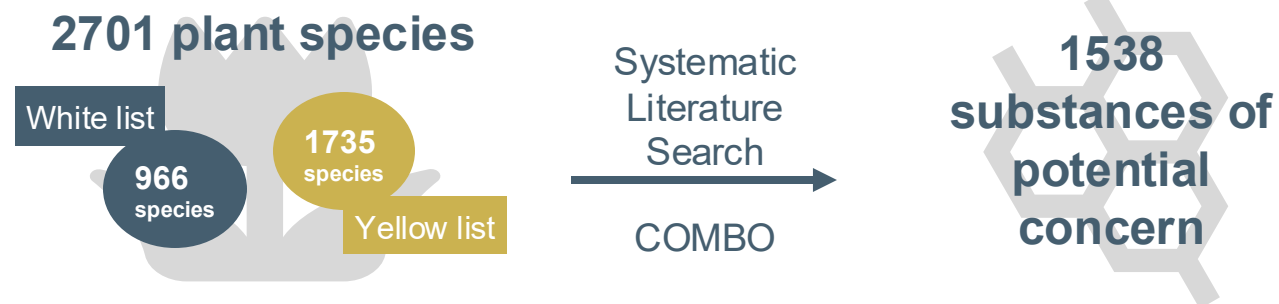
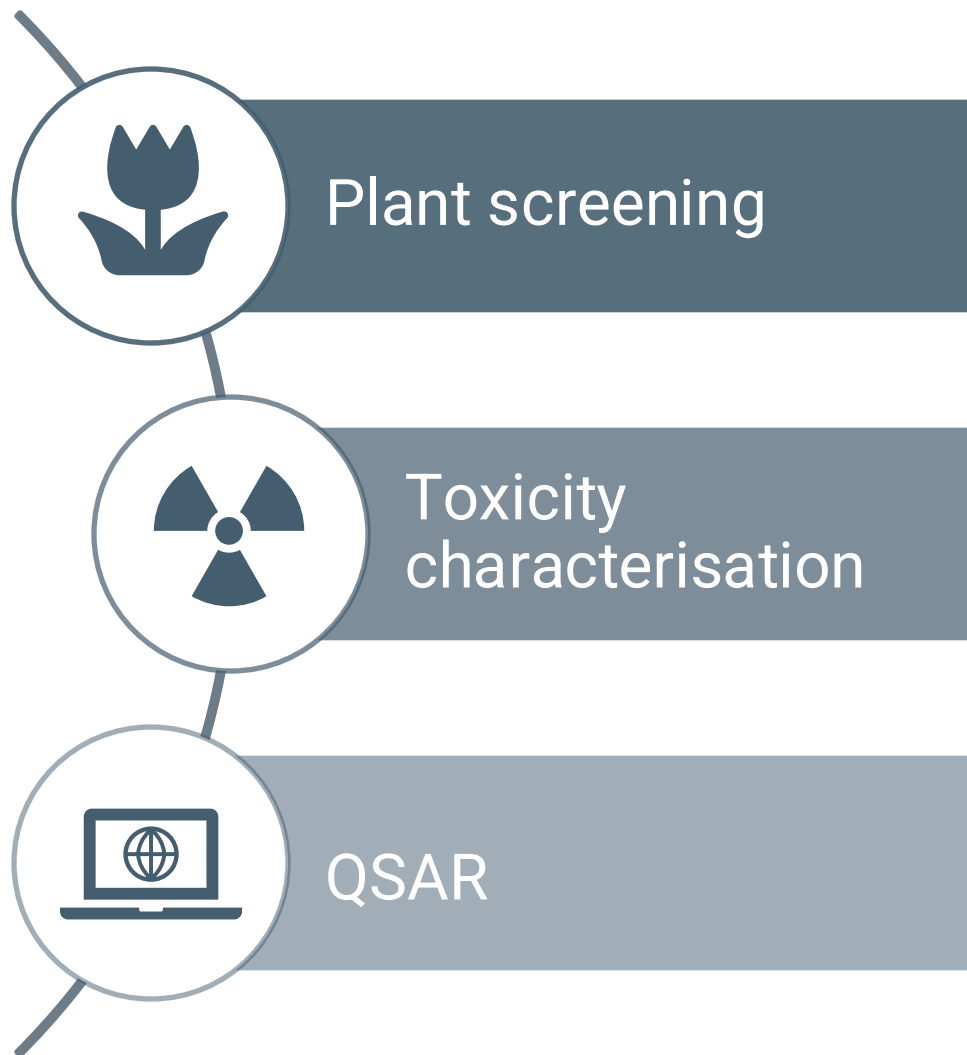
Feed additives



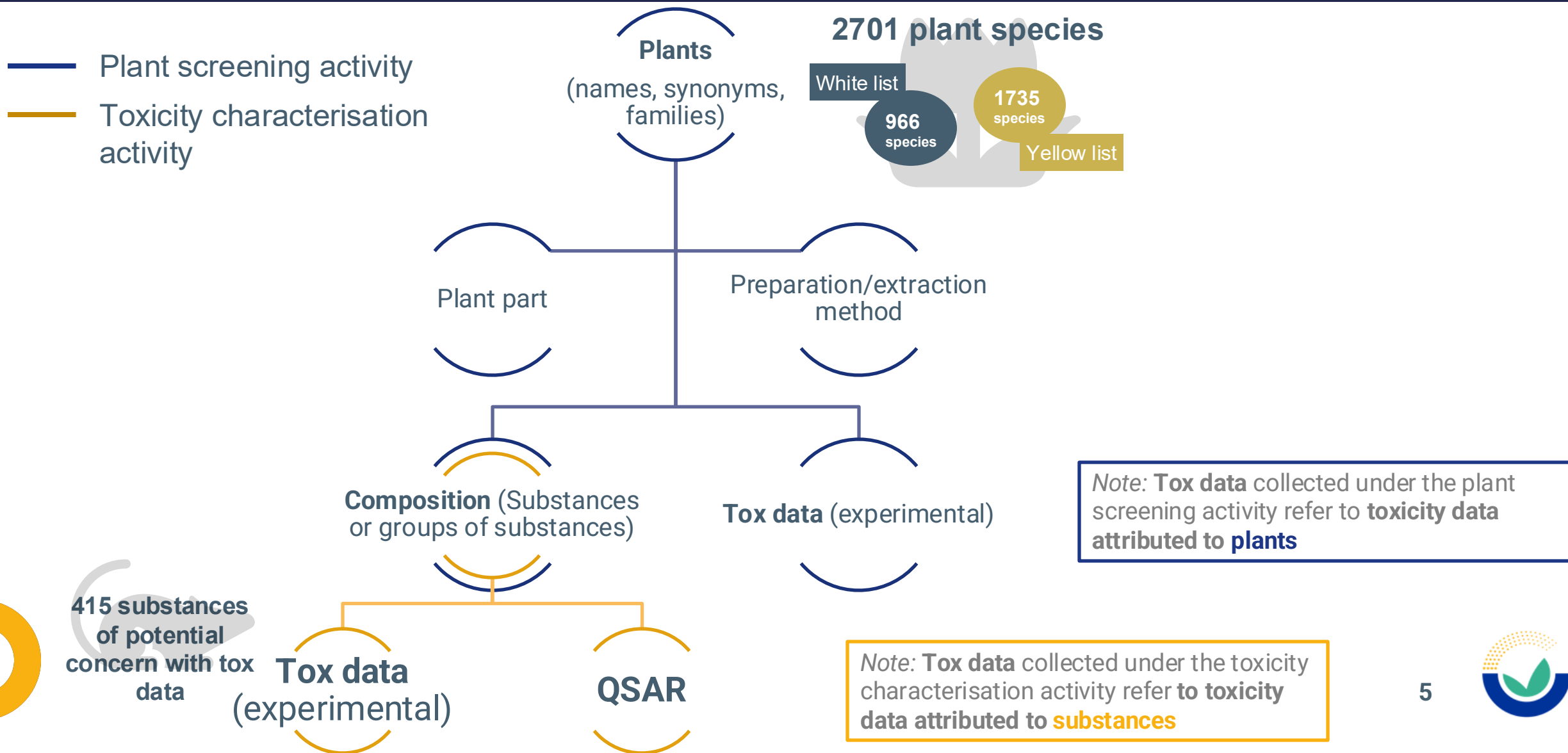
Food supplements



OVERVIEW OF THE ACTIVITIES




THE DATABASE – INFORMATION EXTRACTED/PREDICTED



THE DATABASE – PLANTS TAB

Plants

Substances



Botanicals | Plants

Family	Botanical Species
All Family	All Botanic Species
Acanthaceae	Abarema cochliocarpus (Gomes) Barneby & J.W.Grimes//Pithecellobium avaremotemo Mart.
Acanthaceae	Abelmoschus esculentus (L.) Moench//Hibiscus esculentus
Achariaceae	Abelmoschus esculentus (L.) Moench//Hibiscus esculentus L.
Acoraceae	Abelmoschus moschatus Medik.
Actinidiaceae	Abies alba Mill.
Adiantaceae (Pteridaceae)	

Link to the substances tox data

Substances

Substance Name
(-)-hydroxycitric acid (hca)
(-)-camphor
(-)-cathinone
(-)-globulol
(-)-guaiaretic acid
(-)-pinocamphone
(-)-sparteine
(+)-alpha-cedrene
(+)-alpha-hydroxyversotrine
(+)-diasyringaresinol

Plant Composition									
Plant Name	Substance Name	Substance Description	Plant Part	Preparation	Preparation Description	Analytical Method	Expr Resu		
Abelmoschus esculentus (L.) Moench//Hibiscus esculentus	Alkaloids		Live plants	Solvent extraction	Methanol	Phytochemical screening			
Abelmoschus esculentus (L.) Moench//Hibiscus esculentus			Live plants	Solvent extraction	Methanol	Phytochemical screening			

Plant Adverse Effects							
Plant Name	Plant Part	Preparation	Preparation Details	Toxicity	Test Type	Species	Strai Test Orga
Abarema cochliocarpus (Gomes) Barneby & J.W.Grimes//Pith avaremotemo Mart.	Bark	Solvent extraction	Ethanol 70% (infusion and hydroalcoholic extract)	Hepatotoxicity	Subchronic	House mouse (as animal)	Swiss
Abarema	Bark	Solvent	Ethanol	Hepatotoxicity	Subchronic	House	Swiss

Plant Genotoxicity							
Plant Name	Genotoxicity Endpoint	Genotoxicity Outcome	Type of Test	Method Type	Tested Organism	Strain of Test Organism	Sex
Acacia nilotica (L.) Delille//Acacia arabica (Lam.) Willd.	DNA damage and/or repair	Positive	DNA damage and repair assay, unscheduled DNA synthesis in mammalian cells in vitro	In vitro	Human (as organism)	WI-38 cells - Human	No c

Plants

Plant Name

Search Plant Name

Plant Family

Search Plant Family

Substance

Search Substance

Filtering

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THANK YOU!



TIMELINE AND ACHIEVEMENTS

