



SCIENTIFIC COMMITTEE

CUMULATIVE MINUTES OF THE MEETINGS OF THE WORKING GROUP ON COMPENDIUM OF BOTANICALS HELD IN 2020

(Agreed on 23.12.2020)

Participants

■ Working Group Members:

Robert Anton, Ulla Beckman-Sundh, Carlo Bicchi, Qasim Chaudhry, Massimo Collino, Wirginia Kukula-Koch, Kirsten Pilegaard, Mauro Serafini and Vittorio Silano

■ External Contractors:

ECOMOLE: Krystof Dibusz, Pavla Vejvodova

■ EFSA:

SCER Unit: Bernard Bottex and Justyna Slodek Wahlstrom

1. Adoption of agenda

Due to the specific format of the meetings (one-to-one meetings between each expert and EFSA staff to review work progress), no formal agenda was drafted. See Note below for further details.

2. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence¹ and the Decision of the Executive Director on Competing Interest Management², EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process, and no interests were declared orally by the members at the beginning of this meeting.

3. Scientific topic(s) for discussion

NOTE: As agreed a priori with the hierarchy, due to the format as well as the repetitive nature of the WG Compendium of Botanicals meetings that took place in 2020 (always one-to-one meetings between expert and EFSA staff to review the work done), minutes for single meetings have been

¹ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf

² http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf

replaced by one single document summarising the meetings held in 2020 and describing briefly the work carried out. These “summary minutes” shall be approved by the working group members and published at the end of the year. Hence, they fall under SOP 005 as an ex-ante agreed exception, and do not constitute a non-conformity.

Over the last five years, the activities of the EFSA WG on Compendium of Botanicals focused on transforming the initial Excel file into a web-accessible user friendly database, increasing the number of plants in the Compendium to around 2600 species, and improving the quality of the information provided on composition, toxicity and adverse effects by means of an extensive search of the literature for the plants considered.

The WG activities in 2020 were two-fold:

- Validation of the composition/toxicity information retrieved for around 200 plant species, and coding of the relevant information so that it is ready to be transferred to the EFSA database;
- Development of the methodology to characterise the toxicity of the plant-based substances identified as of possible concern for human health. A combination of literature search, QSAR and read-across will be used for this purpose.

To fulfil the above objectives, in the course of 2020, 16 meetings were held for the review of the plants; additionally, 2 meetings were carried out on plant substances toxicity characterisation. Please refer to Annex 1 for further details on meeting dates and experts participation.

Due to Covid-19 pandemics, all meetings took place in the form of webconferences.

4. Next meeting(s)

As the project will continue over next three years, another series of meetings (19 for the validation of the remaining 700 plant species, and 4 for the plant substances toxicity characterisation) will be organised in 2021 with the same format.

A mid-term of the project meeting will be organised in September 2021 with the whole working group and the Contractor of the project to review progress made and agree on the working strategy for the second half of the project.

Annex I

22-Jun-20	22-Jun-20	Plant validation with Vittorio Silano
30-Jun-20	30-Jun-20	Plant validation with Massimo Collino
01-Jul-20	01-Jul-20	Plant validation with Qasim Chaudhry
06-Jul-20	06-Jul-20	Plant validation with Carlo Bicchi
07-Jul-20	07-Jul-20	Plant validation with Wirginia Kukula-Koch
16-Jul-20	16-Jul-20	Plant validation with Ulla Beckman-Sundh
17-Jul-20	17-Jul-20	Plant validation with Mauro Serafini
21-Sep-20	21-Sep-20	Plant validation with Robert Anton
08-Oct-20	08-Oct-20	Plant validation with Robert Anton
22-Oct-20	22-Oct-20	Plant validation with Vittorio Silano
13-Nov-20	13-Nov-20	Plant substances toxicity characterisation with Qasim Chaudhry
19-Nov-20	19-Nov-20	Plant validation with Carlo Bicchi
26-Nov-20	26-Nov-20	Plant validation with Vittorio Silano
30-Nov-20	30-Nov-20	Plant validation with Virginia Kukula-Koch
01-Dec-20	01-Dec-20	Plant validation with Mauro Serafini
09-Dec-20	10-Dec-20	Plant validation with Massimo Collino
17-Dec-20	17-Dec-20	Plant substances toxicity characterisation with Qasim Chaudhry
21-Dec-20	21-Dec-20	Plant validation with Carlo Bicchi



SCIENTIFIC COMMITTEE AND EMERGING RISKS UNIT

SCIENTIFIC COMMITTEE

MINUTES OF THE 28TH MEETING OF THE WORKING GROUP ON COMPENDIUM OF BOTANICALS

Held on 11 & 12 November 2019, Parma

(Agreed on 6 December 2019)

Participants

■ Working Group Members:

Robert Anton, Ulla Beckman-Sundh, Carlo Bicchi, Qasim Chaudhry, Massimo Collino, Mauro Serafini and Vittorio Silano (Chair).

■ External Contractors:

ECOMOLE: Krystof Dibusz, Pavla Vejvodova¹

Mario Negri Institute for Pharmacological Research: Emilio Benfenati²

■ EFSA:

SCER Unit: Bernard Bottex, Jean Lou Dorne

NUTRI Unit: Eirini Kouloura

■ Others:

EUROPOL: João Simões³

¹ Via webconference

² Participated to the discussion of agenda point 4.4 via webconference

³ Participated to the discussion of agenda point 4.3 via webconference

1. Welcome and apologies for absence

The Chair welcomed the participants.

Apologies were received from Secundino Lopez Puente and Kirsten Pilegaard.

2. Adoption of agenda

The agenda was adopted without changes.

3. Declarations of Interest of Working Groups members

In accordance with EFSA's Policy on Independence⁴ and the Decision of the Executive Director on Competing Interest Management⁵, EFSA screened the Annual Declarations of Interest filled out by the Working Group members invited to the present meeting. No Conflicts of Interest related to the issues discussed in this meeting have been identified during the screening process, and no interests were declared orally by the members at the beginning of this meeting.

4. Scientific topic(s) for discussion

4.1. Transformation and further development of the EFSA Compendium of Botanicals (COMBO) (OC/EFSA/SCER/2015/05)

The working group reviewed the final report prepared by EcoMole for the COMBO Project that will end in December 2019. The report describes the activities performed these last four years to transform the initial Excel file into a web-accessible user friendly database, increase the number of plants in the Compendium and improve the quality of the information provided on composition, toxicity and adverse effects for around 1700 plant species.

The working group made a number of comments and suggestions to improve the content of the report. Suggestion was also made to publish a short fact sheet, together with this report, and the database summary reports, explaining in a couple of pages what the compendium is about and its purpose, what was done since the last version, and what will be the next steps.

The new version of the Compendium of Botanicals will be published together with the final report of the project and the above-mentioned fact sheet early 2020.

4.2. Assistance to the EFSA Emerging Risks Exchange Network (EREN)

Two briefing notes on possible emerging risks prepared by members of EREN were brought to the attention of the working group for possible review and comments.

The first issue concerns the use of ecdysteroids and more specifically ecdysterone in food supplements for anabolic purposes. The second issue is about the risk for hepatotoxicity associated with the consumption of turmeric or curcumin containing food supplements. The views of the working group were forwarded to the Secretariat of the network who will present them at the next meeting of the network.

⁴ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/policy_independence.pdf

⁵ http://www.efsa.europa.eu/sites/default/files/corporate_publications/files/competing_interest_management_17.pdf

4.3. Assistance to EUROPOL

The working group was contacted by the European Counter Terrorism Centre of EUROPOL to review a draft report entitled "Poison Wars – Plant toxins; potential threats". This report was prepared in response to a series of publications from a group of terrorists explaining how to use 11 plant species to kill people. The Europol report is intended to raise awareness among law enforcement agencies on this possible threat.

The working group reviewed the draft report, making some suggestions to improve its usefulness. The Compendium of botanicals was used to retrieve additional LD50 values for the plants / substances of concern considered.

4.4. Consolidation and further development of the EFSA Compendium of Botanicals (COMBO2) (OC/EFSA/SCER/2018/03)

Following the activity described in section 4.1 of these minutes, EFSA identified the need i) to apply to an additional 900 plant species the same methodology applied to the above-mentioned 1700 plants to collect the scientific literature and retrieve relevant information on composition and toxicity/adverse effect, and ii) to characterise the toxicity of around 2500 substances flagged as of possible concern for human health in the first part of the project (COMBO).

For i), the working group recommended to follow the same approach used to retrieve relevant information for the 1700 plant species in order to avoid methodological discrepancies among the 2600 plant species that the database will contain at the end of the project.

Regarding ii), the working group acknowledged that for the majority of the substances flagged as of possible concern for human health, there will be little if no information available on toxicity in the literature. Decision was therefore made to use in silico methods + read across when experimental data are missing. Before doing so, the validity of the available in silico models will be tested with the substances flagged as of possible concern for human health that are already existing in the EFSA OpenFoodTox database, i.e. for which experimental data exist; the working group decided to consider the endpoint genotoxicity/mutagenicity for the testing phase.

4.5. Assistance to the EFSA NUTRI Unit

The working group was provided with an overview of the assistance provided to the EFSA NUTRI Unit with regard to the assessment of the notifications for traditional foods; the information contained in the Compendium of Botanicals and the expertise of the working group are used to complement the data provided in the notification. Two members of the working group were invited to volunteer to extract the relevant information for the assessment of *Plukenetia volubilis* roasted seeds as a traditional food.

Eirini Kouloura presented the new platform, called "Ratings", developed for the NUTRI Unit to collect and rate the literature retrieved for a given novel or traditional food.

5. Next steps

The working group was informed about the following activities for the beginning of 2020:

- Start validating the composition/toxicity information retrieved for the 900 plant species
- Draft the fact sheet on the Compendium of Botanicals to be published together with the final report of the COMBO project and the release of the updated database
- List the endpoints of interest for the characterisation of the toxicity of the substances of possible concern for human health and organise them by order of priority. For each endpoint, a description of the type of data/evidence needed will be provided in order to facilitate the search of the literature by the contractor.

The contractor will generate a list of the substances of possible concern that are already existing in OpenFoodTox. This list will be used for the testing of the available in silico models for prediction of toxicity.