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ARAB CODEX INITIATIVE
المبادرة العربيـة
للـدستور الغذائي

JOINT CCAFRICA/CCLAC/CCNE/US CODEX

COLLOQUIUM ON CCCF18

May 28, 2025

ARAB CODEX INITIATIVE
المبادرة العربية للدستور الغذائي

AGENDA ITEM 13

DEVELOPMENT OF A CODE OF PRACTICE FOR THE PREVENTION AND REDUCTION OF TROPANE ALKALOIDS IN FOOD AND FEED
CX/CF 25/18/14

(Prepared by the Electronic Working Group, chaired by China, co-chaired by Saudi Arabia)

Presented by Amal Alhumaimi
Oman

BACKGROUND

Year	Committee/ Organization	Action / Outcome
2020	FAO/WHO Expert Meeting	▪ **Provided scientific advice on the risks of Tropane Alkaloids (TAs) in foods.**
2022	(CCCF15)	▪ **Noted the need for follow-up actions based on the FAO/WHO Expert Meeting's advice.**
2023	(CCCF16)	▪ **Established an Electronic Working Group (EWG), chaired by China and co-chaired by Saudi Arabia, to prepare a discussion paper on the need and feasibility of actions on TAs.**

2024	(CCCF17)	▪ **Reviewed the first discussion paper (CX/CF 24/17/11) prepared by the EWG.**
		▪ **Re-established the EWG (same chairs) to develop a revised discussion paper including:**
		  ○ **A proposed Code of Practice**
		  ○ **A project document for CCCF18.**
		▪ **Requested JECFA to issue a call for data on TA contamination in food and feed, with guidance on sampling stages.**

CCCF18 (2025)

CCCF is invited to decide whether the current data and information provided are sufficient to support **new work** on a **Code of Practice (CoP)** for preventing and reducing TA contamination in food and feed.

If yes, CCCF should:

1. Review and adjust the **project document** and forward it to **CAC48 (2025)** for approval as new work.

2. Assess the draft CoP outline for structure, content, and areas needing improvement following approval of new work by CAC48,

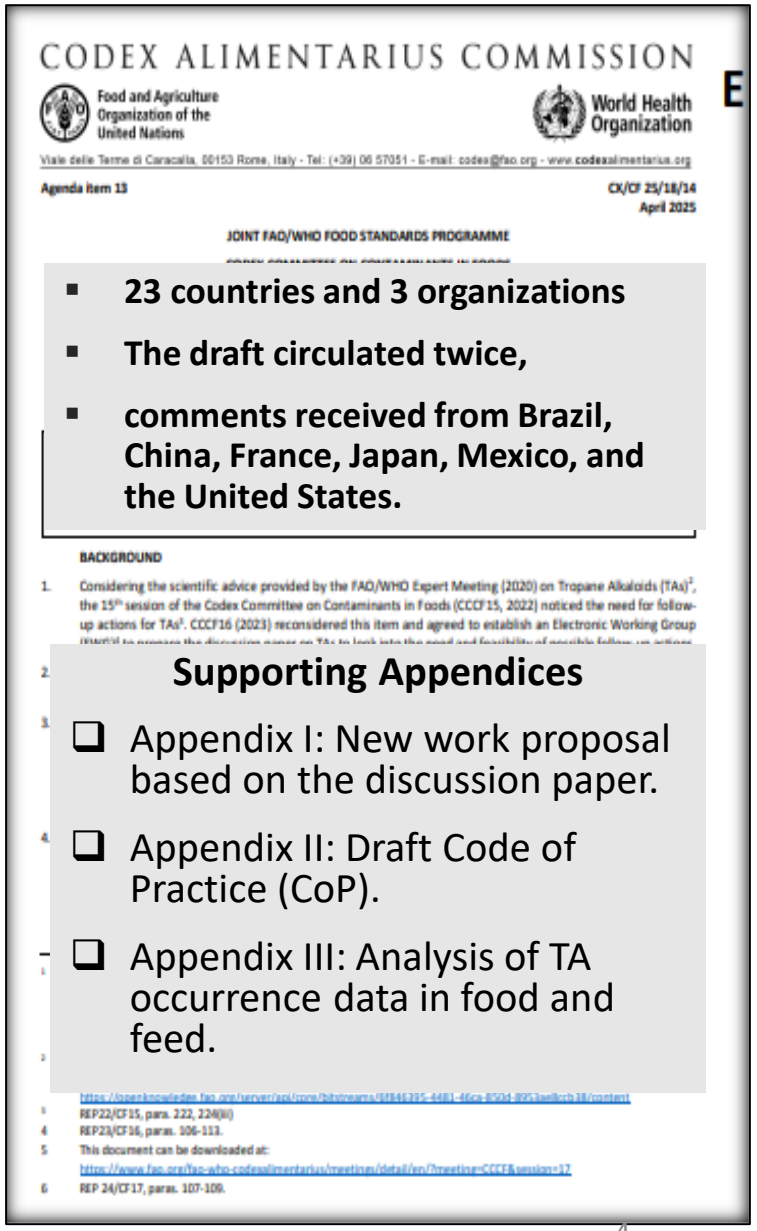
3. Re-establish the EWG to further develop the CoP for **CCCF19 (2026), based on the guidance provided by CCCF** .

If not and the discussion paper needs further development:

CCCF is invited to identify gaps and needed data/information to guide the EWG's future work.

Work process and key point discussion

Modification	Rationale
1. Retention of Original Title	The broader title reflects the CoP's comprehensive scope, including field, processing, and consumer-level measures. It also allows future inclusion of other TA-producing plants (e.g., Atropa belladonna).
2. Inclusion of Animal Feed in Scope	Although initially excluded due to minimal human health risks (EFSA, 2008), it was reintroduced to address direct animal health impacts and protect farm productivity under the One Health approach.
3. Reference to Codex Feed Guidance (CXC 54-2004)	Ensures alignment with existing Codex standards for animal feed, supporting global consistency and ease of implementation.
4. Conditional Future Inclusion of Other TA Plants	Suggested expansion to include species like Atropa belladonna, especially due to equine sensitivity, was postponed pending further scientific evidence.
5. Emphasis on Processing Stage Data Needs	More data is needed on TA levels during post-harvest and processing to assess mitigation effectiveness; current data lack sampling context and traceability.
6. Field Management as Primary Control Strategy	Despite data gaps in processing, strong weed control at the field level remains the most effective and proven method to reduce TA contamination.



CODEX ALIMENTARIUS COMMISSION

Food and Agriculture Organization of the United Nations

World Health Organization

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Agenda Item 13

CX/CF 25/18/14
April 2025

JOINT FAO/WHO FOOD STANDARDS PROGRAMME

- **23 countries and 3 organizations**
- **The draft circulated twice,**
- **comments received from Brazil, China, France, Japan, Mexico, and the United States.**

BACKGROUND

1. Considering the scientific advice provided by the FAO/WHO Expert Meeting (2020) on Tropane Alkaloids (TAs)[2], the 15th session of the Codex Committee on Contaminants in Foods (CCCF15, 2022) noticed the need for follow-up actions for TAs[3]. CCCF16 (2023) reconsidered this item and agreed to establish an Electronic Working Group

Supporting Appendices

- ❑ Appendix I: New work proposal based on the discussion paper.
- ❑ Appendix II: Draft Code of Practice (CoP).
- ❑ Appendix III: Analysis of TA occurrence data in food and feed.

https://openknowledge.fao.org/server/api/core/bitstreams/5f846395-4481-46ca-8504-8953ae8ccb18/content

3 REP22/CF15, para. 222, 224(iii)

4 REP23/CF16, paras. 106-113.

5 This document can be downloaded at:
https://www.fao.org/fao-who-codexalimentarius/meetings/detail/en/?meeting=CCCF&session=17

6 REP 24/CF17, paras. 107-109.

The main sections and information provided in the discussion paper

Section	Key Points / Content Summary
Introduction	**Presents updated data** from GEMS/Food and EWG input. Builds on previous work (CCCF17, CX/CF 24/17/11).
Information available to Develop CoP	Focus shifts from toxicology and risk (covered previously) to strategies for controlling TA contamination in food and feed.
Key TAs & Risk Focus	Atropine and scopolamine are primary toxins, causing acute health risks requiring proactive risk management to prevent spikes.
Exposure Sources	1) Unintentional contamination from Datura and other TA plants mixed with staple crops during processing/storage. 2) Misidentification by consumers ingesting toxic plant parts.
CoP Control Focus	1) Supply-chain interventions: phytosanitary monitoring, mechanical sorting to exclude contaminated material. 2) Public awareness via education, visual ID tools, and workshops.
TA-Containing Plants	Widespread in several plant families; main concern is Datura species causing sporadic high contamination events in food/feed.
Occurrence Data in food and feed	Extensive GEMS/Food data (2006-2023) analyzed; contamination mostly sporadic, highest in cereals, spices, herbs, feeds.
Processing Impact	**Lack of processing-stage data; current evidence shows limited effect of food processing on TA reduction; prevention critical.**
Feasible Mitigation Measures	**Effective control through:- Weed management (herbicides, integrated approaches)- Crop rotation, soil management, seed purity- Monitoring, removal, cleaning, traceability- Training and consumer awareness campaigns.**
Key Recommendations	**Emphasize field management and supply-chain controls, complemented by consumer education for effective TA contamination mitigation.**

Recommendations

01

Support the new work proposal and forward the revised project document and CoP draft to **CAC48 (2025)**.

02

Confirm that the structure and focus areas of the CoP (field control, supply chain, awareness) are sufficient and globally applicable. Suggest content refinements as needed.

03

Support continued data calls, specifically targeting post-harvest and processing-stage contamination data, to improve future CoP updates.

04

Agree to re-establish the EWG with an updated mandate to revise the CoP and integrate feedback from CCCF18.


thank you
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Баярлалаа
спасибо
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