



**JOINT FAO/WHO FOOD STANDARDS PROGRAMME
CODEX COMMITTEE ON CONTAMINANTS IN FOODS**

**13th Session
Yogyakarta, Indonesia, 29 April – 3 May 2019**

DISCUSSION PAPER ON THE ESTABLISHMENT OF MLS FOR HCN IN CASSAVA AND CASSAVA-BASED PRODUCTS AND OCCURRENCE OF MYCOTOXINS IN THESE PRODUCTS

Comments submitted by European Union, Kenya, United States of America

European Union

The EU notes that no information is provided on the issue of harmonizing the expression of HCN levels, i.e. free or total HCN while this is considered important. The EU is of the opinion that it would be appropriate that all maximum levels established for hydrocyanic acid refer to total hydrocyanic acid, i.e. hydrocyanic acid, including hydrocyanic acid bound in cyanogenic glycosides.

The EU is of the opinion that based upon the data provided in the discussion paper it is not appropriate to extend the ML of 2 mg/kg for free hydrocyanic acid in gari to all fermented products. However, given the high levels found, it might be appropriate to consider a maximum level for fermented cassava-products other than gari.

However, no information is provided if the data provided on the presence of HCN in the discussion paper relate to free or total hydrocyanic acid. The EU is of the opinion that it is most probable that the reported data refer to total hydrocyanic acid. Therefore, conclusions as regards compliance of reported levels of HCN for fermented products such as gari with the ML expressed as free HCN for gari has to be considered with caution.

Therefore, the EU is of the opinion that it is necessary to first harmonise the expression of HCN levels, i.e. free or total HCN, and to clarify if the data reported in the discussion paper refer to free or total hydrocyanic acid.

In case it is concluded to express the maximum level on total hydrocyanic acid, it has to be considered if this requires a change of the ML of HCN for gari, currently expressed as free hydrocyanic acid. Subsequently, the setting of a maximum level for HCN in other fermented cassava products can be considered.

As regards the presence of mycotoxins in cassava and cassava products, the EU is of the opinion that, from a public health point of view, it would be appropriate to continue considering the need to set a possible maximum level for aflatoxin total and ochratoxin A in cassava and cassava based products. It is therefore suggested that a discussion paper is elaborated related to the presence of aflatoxin total and ochratoxin A in cassava and cassava products for consideration at the 14th session of the CCCF.

Kenya

GENERAL COMMENT

We would like to thank the electronic working group chaired by Nigeria for coming up with Discussion paper on the establishment of MLs for HCN in cassava and cassava-based products and occurrence of mycotoxins in these products. Kenya, as the CCAFRICA Coordinator, is currently coming up with fermented cooked cassava and cassava products and we hope this will facilitate our region CCAFRICA meeting which will be held in September 2019. We believe the committee will reach a favorable conclusion to this effect.

COMMENTS

Kenya supports the discussion paper and the proposed HCN safety limits therein.

¹ Comments of Republic of Korea have been removed and compiled in CRD23.

We believe the committee will have consensus on the HCN safety limits on fermented cooked cassava products. We have noted that the cover of the cassava which is not edible contains more than 70% and fermentation of cassava also reduce the amount of HCN. When it is cooked, the water that contains HCN is also discarded and with all these process, the committee would be able to reach consensus on the safety limits.

JUSTIFICATION

Cassava and cassava based products are widely consumed in Kenya and research done by EWG has revealed a lot of information.

United States of America

HCN

- The United States notes that an ML of 2 mg/kg for free HCN in Gari and an ML of 10 mg/kg for total HCN in Cassava flour have been established in the GSCTFF (CXS 103-1995, amended 2018).
- The United States considers proposing to extend the ML of 2 mg/kg free HCN in Gari to Fufu may be appropriate based on 87% of 75 Fufu samples with HCN levels above 2 mg/kg in Table 4. Additional data, however, on the HCN levels in Fufu and the health impact of HCN exposure at the proposed ML of 2 mg/kg are needed.
- The United States agrees that more data are needed to determine whether MLs are needed for other fermented cassava products.
- Further work to propose MLs should be based on data submitted to GEMS/Food.

Mycotoxins

- The United States notes co-occurrence of aflatoxins and ochratoxins are common in many foods and agrees with the importance of considering whether mycotoxins in fermented cassava products are a health concern. Based on this paper, there are not sufficient data at this time to support new work on maximum levels for mycotoxins in fermented cassava products.
- The United States notes that it submitted results to GEMS/Food for multiple mycotoxins on 60 imported fermented cassava samples. No aflatoxins or ochratoxin were found in the 60 samples above the LOQs for aflatoxins (0.9 – 2.7 µg/kg) and ochratoxin A (2.4 µg/kg).