CODEX ALIMENTARIUS COMMISSION E

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World Health Organization

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Agenda Item 9 **CX/CF 14/8/9-Add.1**
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JOINT FAO/WHO FOOD STANDARDS PROGRAMME

CODEX COMMITTEE ON CONTAMINANTS IN FOODS

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PROPOSED DRAFT MAXIMUM LEVELS FOR FUMONISINS IN MAIZE AND MAIZE PRODUCTS AND ASSOCIATED SAMPLING PLANS

Comments at Step 3 submitted by European Union, Japan,, Republic of Korea and African Union

EUROPEAN UNION

As regards the proposed maximum level of 5000 µg/kg for fumonisin B1 + B2 in corn/maize grain, unprocessed presented for consideration

The EU is of the position that it needs to be clarified if there a difference between "unprocessed" as mentioned for the proposed maximum level of fumonisin B1 + B2 and "raw" as mentioned for the proposed maximum level of deoxynivalenol and the Codex maximum level of ochratoxin A.

It is known that cleaning and sorting processes on raw maize grains can significantly reduce the contamination level of fumonisins in maize. Therefore the EU requests clarification that acceptance of a level for raw maize at Codex level is not in contradiction with the setting of stricter levels by member countries for maize marketed for first-stage processing after eventually cleaning and sorting processes on the raw maize grains have been applied. In case this is confirmed and the term "unprocessed" is to be understood as "raw", the EU could agree on the proposed level. In case this is not confirmed, the EU is of the opinion that a lower maximum level should be considered, as processes, other than cleaning and sorting, applied in food manufacturing do not remove to a large extent fumonisins from the food chain.

As regards the proposed maximum level of 2000 µg/kg for fumonisin B1 +B2 in corn/maize flour meal presented for consideration

The EU notes that there are significant differences in presence of fumonisins in the different maize milling products in function of the particle size. It can be observed that larger particle size maize products contain less fumonisins than the smaller particle size maize products. In case the term "flour/meal" refers only to the smaller particle size milling fraction (particle size 500 micron or less) the EU can agree with the proposed level.

As regards the associated sampling plans presented for consideration.

The EU wishes to receive clarification as to why the option of 100 incremental samples of 100 g resulting in an aggregate sample size of 10 kg has not been integrated in figure 2, and as to why a separate figure 5 has been created which is the same as figure 2 but with the addition of the option of a sample size of 10 kg.

Furthermore the EU is of the position that besides the consideration of the operating characteristic curves to determine the most appropriate sample size, for practical reasons (and simplicity) it is appropriate to consider the use of the same sampling plan for similar toxins (deoxynivalenol and fumonisins are both *Fusarium* toxins*)* in the same commodity (maize/corn grain).

Therefore the EU is of the opinion that it is appropriate to establish for the control of fumonisins in maize the same sampling plan. The EU wishes therefore also to hereby re-iterate its comments made for the proposed sampling plan for deoxynivalenol.

The EU is of the opinion that an aggregate sample weight of 10 kg is preferable, but can accept 5 kg.

Depending on the outcome of the discussions as regards the appropriate sampling plan for the control of deoxynivalenol in maize and in line with the comments made on the proposed sampling plan for the control of deoxynivalenol in maize, the EU proposes to consider an aggregate sample weight of 10 kg, which might be reduced to a laboratory sample of 1 kg by making use of a mechanical or automatic divider.

JAPAN

As stated in the paragraph 5 in the working document (CX/CF 14/8/9), the 74th JECFA (2011) concluded that the occurrence of fumonisins in feed was not considered to be a human health concern because fumonisins did not transfer from feed to edible tissues of animals in significant amounts. Therefore, the Committee should clarify that the MLs for fumonisins should apply only to maize and maize products for human consumption but not to those used for feed. We propose that theremark "Intend for human consumption only" which attached to the "Maize grain, unprocessed" should also attached to the "Maize flour/meal".

In addition, we propose changing the commodity name "Maize grain, unprocessed" to "Raw maize grain" for consistency with commodity name for MLs of other contaminants.

REPUBLIC OF KOREA

Republic of Korea would like to propose to additionally set maximum level of 1000 μg/kg also for processed grain products and breakfast cereals containing at least 50% of simple processed corn/maize and for popcorn maize products.

AFRICAN UNION

AU does not support the proposed draft MLs of 5000 μg/kg for maize grain unprocessed and 2000 μg/kg for maize flour/meal, for fumonisins (FB_1 + FB_2).

In Africa, maize is frequently a dietary staple and consumption can be as high as 500 g/person per day. In this regard, African countries are very different from most other countries and require special attention to setting MLs for mycotoxins in maize. This is of special importance because many traditional African maize-based food dishes are based on the use of maize kernels, without prior industrial processing. For this reason, we consider the current proposed ML for unprocessed maize grain to be too high.

AU would propose a ML of 4000 μg/kg (equivalent to the current EU level for unprocessed maize) for maize grain intended for further commercial processing which is capable of reducing levels

We cannot accept higher MLs and require any levels set for raw unprocessed maize to apply only to maize intended for further processing, excluding maize intended for direct human consumption. African countries are in a unique position of consuming large quantities of maize as human food, frequently without commercial processing known to reduce contamination levels.

In addition we propose a ML of 1000 μg/kg for maize flour/meal.

Again, the high maize consumption of African populations requires a ML below that of the current proposal. There is sufficient evidence to show that this ML of 1000 μg/kg (currently in force in the EU as a ML for maize intended for direct human consumption) can be achieved by the commercial dry milling process used for maize flour/meal production and that 75% reduction from the proposed ML of 4000 μg/kg for raw maize can be readily achieved.

The aggregate sample size (5 kg) for raw maize is the same as that for DON, making the task of sample collection for the enforcement of MLs for these two mycotoxins easier.

AU supports the proposed sampling plan, but require the decision rule to include provision for laboratory method uncertainty.

A decision rule must allow for the uncertainty implicit in a chemical analysis before a lot is rejected. Thus only if the lot exceeds the ML plus the uncertainty factor, should it be rejected.