codex alimentarius commission





JOINT OFFICE: Viale delle Terme di Caracalla 00100 ROME Tel: 39 06 57051 www.codexalimemarius.net Email: codex@fao.org Facsimile: 39 06 5705 4593

Agenda Item 15 E

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JOINT FAO/WHO FOOD STANDARDS PROGRAMME

CODEX COMMITTEE ON FOOD ADDITIVES AND CONTAMINANTS Thirty-fifth Session Arusha, United Republic of Tanzania, 17 - 21 March 2003

PROPOSED DRAFT CODE OF PRACTICE FOR THE REDUCTION OF AFLATOXIN CONTAMINATION IN TREE NUTS

COMMENTS

The following comments have been received from Thailand:

THAILAND:

1. Preamble

We recommend that this code of practice should also cover chestnuts (*Castanea spp.*) since chestnuts are trade in worldwide, in addition, the Recommended International Code of Hygienic Practice for Tree Nuts (CAC/RCP 6-1972) also covers chestnuts as well.

2. Planting

(2.1) Page 4, Planting, we recommend amending para 3 and para 6, in order to make the requirements more flexible and practicable, as follows

Para 3 should be amended to read

"In designing the layout of the orchard, recommended adequate spacing of the tree should be considered. Information concerning plant spacing may be obtained from plant breeders or agricultural personnel."

Para 6, the last sentence should be

- "If possible and practical, animal manure used should be followed the recommendation in GAPs."
- (2.2) We recommend to delete the sentence concerning cover crops in para 7 since the growers may apply any alternative method other than growing cover crops. In this connection, para 7 should be amended to read as follows
 - "The soil in the orchards should be disturbed as little as possible after planting."

3. Preharvest

(3.1) The word "Accurate" in the last sentence of para 11 should be deleted in order to make the requirement more flexible and practicable.

- (3.2) The phrase "however, irrigation water should be prevented from contacting the nuts and foliage" should be deleted from para 12. We are of an opinion that nuts that may expose to irrigation water are not edible portion, moreover, the shells will be removed later during the hulling process.
- (3.3) We recommended amending para 13 to read as follows "Water used for irrigation and other purpose (e.g. preparation of pesticide sprays) should be of suitable quality for intended used.". Since periodically check for evidence of chemical and microbial contamination will cause unnecessary burden to the growers.
- (3.4) Para 16 "Personnel that will be involved in harvesting nuts should be <u>well-trained</u> in personal hygiene and...." We recommend that <u>well-trained</u> should be amending to read "trained" since it is difficult to define how well-trained it should be.

4. Harvest

- (4.1) We are of an opinion that second sentence of para 18 is a difficult provision for developing countries in practical. In this connection we recommend amending para 18 to read as follows "Nuts, harvested by shaking the trees, should be collected on some type of protective sheets or tarps under the trees to prevent nuts from falling to the ground."
- (4.2) Para 19, line 4
 - "High humidities which are conducive to proliferation of mould and development of mycotoxins should be avoided."

We recommend to add "as applicable" after the word "avoided" since some countries that located in tropical zone may face to the difficulty in avoiding high humidity. To add the word "as applicable" will make this requirement more practical and flexible.

5. Processing

- (5.1) Para 23, we recommend to delete the phrase
 - "preferably within 24 hours for these varieties of nuts that are susceptible to shell staining after long exposure to the undried hull." Since normally in practical, the hulling process may begin over 24 hours after harvesting.
- (5.2) Para 24, line 2 the phrase "in closed containers, buildings, or" should be deleted since the phrase "a suitable type of covering that will protect them from insect and dust" has its meaning covered such types of container/building.
- (5.3) Para 25, in order to revise the requirement in para 25 to be more practicable and flexible, it should be amended to read as follows
 - "If a long-term delay in hull removal is expected, the in-hull nuts should be stored in bulk storage containers at cooled and dried place to prevent aflatoxin production."
- (5.4) Para 26, line 4 the phrase "and other defects" should be deleted since all important defects have been specified.
- (5.5) Para 27, we recommend to delete the last sentence of para 27, "Analysis should be conducted by a reliable, independent and accredited laboratory." We are of an opinion that, in this stage of tree nut production, producers should have alternative, convenience methods to analyze aflatoxins.
- (5.6) Para 29, line 1 and 2, the phrase "preferably within 72 hours after harvesting" should be deleted because in practical, time consuming may be over 72 hours.
- (5.7) Para 33, we are of an opinion that it is not necessary to analyze alflatoxin in the nuts before releasing from the processing facility in <u>all outgoing lots</u> since during producing tree nuts each stage of production (selection of orchard sites, planting, preharvest, harvest, processing, transport of processed nuts to storage, storage and postharvest) have implemented Good Agricultural Practice (GAP) and Good Manufacturing Practice (GMP) that can help controlling aflatoxin. We, therefore, recommend to delete the last sentence of para 33.

6. Storage

Para 38, we are of an opinion that the requirement should address the percentage of moisture content instead of water activity, since to analyze moisture content is more convenience than to analyze water activity while we can find out the relationship between moisture content and water activity of each tree nut variety. We, therefore, recommend amending para 38 to read as follows

"Moisture content and temperature should be carefully controlled at 7% or below for minimizing deterioration and fungal growth during time storage."