




AFLATOXIN DEVELOPMENT, PREVENTION & REGULATIONS



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Aflatoxin . . .



**You cannot see them,
You cannot smell them,
You cannot touch them,**

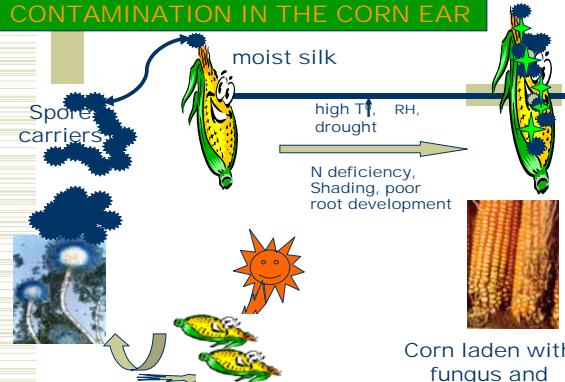
How do you know they are there?

**Aflatoxin can only be detected
using chemical analysis**

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EVENTS LEADING TO AFLATOXIN CONTAMINATION IN THE CORN EAR



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Prevention of Aflatoxin Contamination in Corn

- ◆ Harvest corn at maturity
- ◆ Dry corn ears before shelling; the moisture content should be below 22% before shelling is done to prevent mechanical damage
- ◆ Dry the shelled corn uniformly to 14% within two days from shelling
- ◆ Prevent insect infestation in storage

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Capability Building Measures for Integrated Control of Aflatoxin

1. Good Agricultural Practice (GAP)
 - package of technology for optimum crop production.
 - control of pests and diseases.
 - proper irrigation.
 - appropriate fertilizer application.
 - use of resistant varieties.

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2. Provision of postharvest facilities

- well designed mechanical corn harvester.
- efficient corn shellers.
- fast and efficient mechanical dryers.
- construction of more drying pavements.
- construction of warehouses and bulk handling storage facilities.

3. Farm to market road

- construction of road linking production area to the market.
- use of alternative mode of transportation
 - * by train
 - * water transport system

4. Regulatory control and enforcement

- Enactment of legislation with appropriate funding for a nationwide monitoring and surveillance system for the detection of aflatoxin.
- ample preparation on the part of the government and the industry sectors to be ready for the comprehensive monitoring and surveillance system.

5. Establishment of Mycotoxin laboratories

- must be embodied in the legislation for the monitoring and surveillance system
- reference, central and field Mycotoxin laboratories equipped with the necessary equipment need to be established
- Manpower requirements and MOE must be appropriated

6. Training

- training on sampling, sample preparation for quality control officer.
- training on accepted analytical method for aflatoxin detection for the analyst.
- training on the prevention and control of aflatoxin for farmers and agricultural technicians.

7. Information and advocacy campaign

- awareness campaign on health hazard associated with aflatoxin.
- Information campaign on prevention and control.
- Advocacy campaign to create policy which will provide incentives for premium quality aflatoxin- safe commodities.

8. Research and Development

- Efforts made in prevention and control must be backed-up by strong R and D component.
- One important area needing attention is the development of a reliable low-cost detection method for aflatoxin.

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Bureau of Agriculture and Fisheries Product Standards

What have we done so far?

Formulated and Approved Standards since 2002 for:

Shelled Corn 

Corngrits 

SUCCESS

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Quality Grade Requirements on Shelled Corn & Corngrits*

Grade Factors (% by weight)	Premium Grade	Grade No. 1	Grade No. 2	Grade No. 3
Aflatoxin, max.				
Food*	20 ppb	20 ppb	20 ppb	20 ppb
Feed	20 ppb	20 ppb	50 ppb	50 ppb

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Bureau of Agriculture and Fisheries Product Standards

What have we done so far?

Created TWG on Corn Quality Management (2004- present)

SUCCESS

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What have we done so far?

- Conducted Trainings (2005- present)
- Conducted National Aflatoxin Conference (2004 & 2005)
- Conduct Search for National & Regional Quality Corn Farmers Award (2006)

SUCCESS

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TRAININGS CONDUCTED (2005)

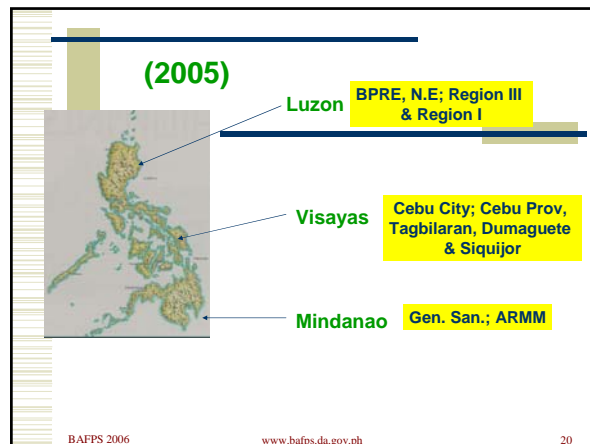
VENUE	DATE	No. of Trainees	Remarks
a. BPRE, NE	26-28 July	52	Trainees were the Provincial Coordinators & Corn Technicians
b. Cebu City	9-11 August	52	
c. Gen. Santos	13-15 Sept.	45	
d. Cebu	27-29 Sept.	35	Trainees were Municipal Corn Coordinators
e. Dumaguete	8-10 October	35	

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TRAININGS CONDUCTED (2005)

VENUE	DATE	No. of Trainees	Remarks
f. Tagbilaran	18-20 October	55	Trainees were Municipal Corn Coordinators
g. Tebag, Pangasinan	11-13 October	45	
h. San Fernando, Pampanga	24 October	107	
i. ARMM	26-28 October	55	

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TRAININGS CONDUCTED (2006)

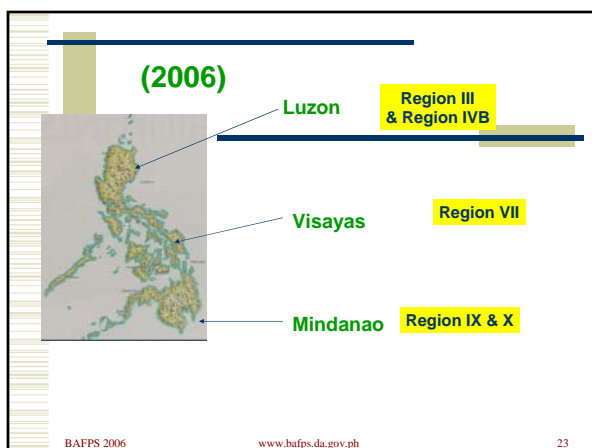
VENUE	DATE	No. of Trainees	Remarks
a. NFA, Gen. San. City	8 January	55	NFA Ext. Personnel
b. Region IX (4 venues)	March 6-8, 20-22; Apr 3-5, 24-26	289	Trainees Were Municipal Corn Coordinators
c. Region IV B (3 venues)	May 3-5, May 23-26, June 6-8	185	
d. Region X (3 venues)	June 26	120	

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TRAININGS CONDUCTED (2006)

VENUE	DATE	No. of Trainees	Remarks
e. Region VII	May 25-26	75	Trainees were Livestock Personnel, Municipal & Prov'l Vet & Food Processors
f. Region III	June 8	100	

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OTHER ACCOMPLISHMENTS

1. Training Modules	Available in CDs
2. Printing of Brochures	In-progress

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THANK YOU!

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