

ASTA ANNUAL MEETING
APRIL 17-20, 2005



The New MRLs For Pesticides

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In the beginning.....

- ECTG assigned working group on 08/19/1986
 - Develop List of Approved Pesticides
 - Need to develop proactive strategy
 - FDA under pressure from GAO
 - More surveillance on imports planned
 - Communicate with industry suppliers

ALLOWABLE PESTICIDES

<u>Product</u>	<u>Pesticide</u>	<u>Trade Name</u>	<u>Tolerance</u>	<u>Source</u>	<u>Note</u>
Processed Herbs & Spices	Methyl Bromide	--	400 ppm	21 CFR 193.250	Fumigation
Dehydrated Peppers and Paprika	Benzene hexa-chloride (BHC)	--	1 ppm	21 CFR 193.35 40 CFR 180.140	Insect Control On Growing Pepper
Ground Spices	Ethylene Oxide	--	50 ppm	21 CFR 193.200 40 CFR 180.151	Post Harvest Application
Processed Spices	Propylene Oxide	--	300 ppm	21 CFR 193.380	Fumigant
Processed Foods	Aluminum Phosphide	Phostoxin	0.01 ppm	21 CFR 193.20	Fumigant
Processed Foods	Magnesium Phosphide	--	0.01 ppm	21 CFR 193.255	Fumigant
Processed Agricultural Foods	Nitrogen	--	none	21 CFR 193.323	Insect Control
Processed Agricultural Foods	Carbon Dioxide	--	none	21 CFR 193.45	Insect Control
Basil, Marjoram, Rosemary, Savory	Napropamide	Devrinol	0.1 ppm	40 CFR 180.328	
Cumin Seed, Ginger Root	Methyl Bromide	--	100 ppm	40 CFR 180.123	Fumigation
Mustard Seed	Parathion	--	0.2 ppm	40 CFR 180.121	Post Harvest
Cumin Seed, Ginger Root	Hydrogen Cyanide	--	250 ppm	40 CFR 180.130	Post Harvest
Mustard Seed	Carbyne	Barban	0.1 ppm	40 CFR 180.268	Herbicide
Mustard Seed	Endosulfan	Thidon	0.2 ppm	40 CFR 180.182	Insecticide
Peppermint and Spearmint Oils	DDT	--	100 ppm 1 ppm	21 CFR 193.110	Insecticide

In the beginning..... what's out there?

- 1987 – ASTA begins Five Year Pesticide Screen
 - Survey of major import crops - origins
 - Chlorinated Hydrocarbons
 - Organophosphates
- Data Requests made to the Industry

In the beginning.....

U.S. Regulatory Climate

- ❑ Tolerances granted in U.S. based upon use
- ❑ Delaney Clause - NAS report: Paradox of the Delaney Clause
- ❑ EDB residues on Black Pepper
- ❑ BHC residues on Sesame Seed
- ❑ Circle of Poison
- ❑ Alar in apples
- ❑ Regulatory action - Reassess pesticide safety

In the beginning....

ASTA Screening program

- Screening results showed issues
 - Trace residues – environmental contamination
 - Many of these were for unapproved compounds
- What else is present?
 - Screening expanded to look for:
 - Herbicides
 - Synthetic pyrethins
 - Dithiocarbamates – carbamates
- Annual Convention Presentation

PESTICIDES AND SPICES

What You Should Know
What You Should Do



THE AMERICAN SPICE TRADE ASSOCIATION

Outcome of Presentation....

- Pesticide Task Force established in 1992
 - Develop “Action Levels” with EPA & FDA
 - Prove safety based upon dietary risk studies
 - Educate source countries – “Clean Spices” Program
- Funding supported by membership

Food Quality Protection Act of 1996

- ❑ Resolution of the “Delaney Paradox”
- ❑ Consideration of Pesticide Benefits
- ❑ Re-evaluation of Existing Tolerances
- ❑ International Standards for Pesticide Residue Levels
- ❑ Periodic Review of Existing Registrations
- ❑ Expediting Reviews of Safer Pesticides

Opportunities for the Spice Trade

- ❑ FQPA allows for EPA acceptance of recognized International Standards
- ❑ International Meeting with Spice Associations held Oct. 1 & 2 , 1997
 - Discussed common concerns
 - Set Strategy for working with CODEX
 - Decided formation of IOSTA
- ❑ IOSTA formed
- ❑ IOSTA received non-governmental observer status

CODEX

- Codex Alimentarius Committee (CAC)
 - Protecting the health of consumers and ensuring fair practices in the food trade.
 - Promoting coordination of all food standards work undertaken by international governmental and non-governmental agencies.

CODEX Committee on Pesticide Residues (CCPR)

- ❑ Develops international agreement on MRLs for pesticides in food
- ❑ Manages the establishment process for MRLs
- ❑ Codex MRLs are recognized by the World Trade Organization as the International standards

Joint Meeting on Pesticide Residues (JMPR)

- ❑ Serves the CCPR conducting scientific evaluations on pesticide residues in food
- ❑ Propose MRLs based upon detailed evaluations
- ❑ Comprised of internationally recognized and independent experts

CCPR MRL Process

Step 1	Recommendations on priority compounds
Step 2	1 st evaluation by JMPR; ADI & MRL
Step 3	Proposed Codex MRL to Gov'ts – 1 st Round
Step 4	1 st discussion of comments to MRL
Step 5	Proposed MRL submitted to CAC
Step 6	2 nd round comment of MRL by Gov't
Step 7	Final discussion of MRL from comments

CCPR MRL Process con't

Step 7a	MRL not further advance until ADI estimated by JMPR
Step 7b	MRL is referred back to JMPR due to new information
Step 7c	MRL is not advanced, waiting further information as specified
Step 8	CAC consideration for adoption as a Codex MRL
Step 5/8	Proposed MRL is submitted to CAC at Step 5 since no controversy received

Spice MRL progression through CCPR

- 31st CCPR 1999 Step 1
 - Issues introduced through India
 - Added to next CCPR agenda
- 32nd CCPR 2000 Step 2
 - Paper presented to Dr Van Eck (Chair of CCPR)
 - “Concern of Developing Countries for the Lack of MRLs and EMRLs for Potential Pesticide Residues in/on Spices”
 - South African delegation assignment
- 33rd CCPR 2001 Step 3
 - Paper presented with:
 - Current national standards
 - Listing of spices / compounds where pesticide detected

Spice MRL progression through CCPR

- 34th CCPR 2002 – Step 4
 - Monitoring data accepted for submission
 - JMPR assigned to develop statistical needs
- 35th CCPR 2003 – Step 5
 - Commodities defined – grouped as:
 - Seeds
 - Fruit or berry
 - Roots/rhizomes
 - Buds
 - Barks
 - Aril
 - Floral parts
 - Capsicums not considered spices
 - JMPR defines statistical needs

Spice MRL progression through CCPR

- 36th CCPR 2004 – Step 6
 - Capsicums traded are dehydrated – dehydration factor required
 - JMPR requested to review existing Capsicum MRLs with dehydration factors
 - JMPR review scheduled for MRL setting against monitoring data

JMPR Meeting

Rome 20–29 Sept 2004

- IOSTA Paper Prepared
 - Pesticide by subgroups
 - Industry data call-in
 - Proposed MRL based on:
 - 95 percentile – minimum 60 data sets required
 - Safety
 - Detection limits / analytical methods
- JMPR
 - Approved proposed MRLs
 - Required periodic surveillance data
 - Forwarded recommendations onto CCPR

37th CCPR Meeting 18-23 Apr 2005

- Currently at Step 7 – approval moves to Step 8

- JMPR recommendations
 - Spices: 28 compounds – 61 groupings
 - Capsicums: 50 compounds

- Official tolerance to be published shortly

Accomplishments

- ❑ Acceptance that residues are a trade issue
- ❑ IOSTA as “Non-Governmental Observer”
- ❑ Understanding that spice are minor contribution to the diet
- ❑ Acceptance by USDA
- ❑ Acceptance of monitoring data
- ❑ Understanding of the process

Next Steps

- Continued generation of monitoring data
- Fill data gaps
 - Insufficient data on 41 other compounds
 - Insufficient data on 93 subgroup
- MRLs for culinary herbs

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THANK YOU!

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QUESTIONS

