T.C.
EKONOMİ BAKANLIĞI
İhracat Genel Müdürlüğü

Sayı : 90061819 - 724.01.02 - 84451 03.07.2015
Konu : AB'nin Fosfonatı Pestisit Olarak Tanımlaması

TÜRKİYE İHRACATÇILAR MECLİSİ GENEL SEKRETERLİĞİNE
Dış Ticaret Kompleksi Çobançeşme Mevkii
Sanayi Cd. B Blok Kat:9 (34196) Yenibosna-İstanbul

ABD Büyükelçiliği tarafından 18 Haziran 2015 tarihinde AB'nin fosfonat (fosfit) ve fosetillere ilişkin düzenleyici mevzuatındaki değişikliklerinin üretici ülkelere etkilerine dair bir seminer düzenlenmiştir. Söz konusu seminerde:

- AB'nin 2013 yılında fosfonatı hem gübre hem de pestisit olarak tanımlamak yerine yanlızca pestisit olarak tanımlamaya başladığı,

- Fosfonat kalıntıları için ayrı bir azami kalıntı limiti (Maximum Residue Limit-MRL) belirlemek yerine bu ürünlerin kalıntılarını fosetil (fosetyl-Al) pestisiti için belirlenen limit altına dahil ettiği,

- Söz konusu limitin AB tarafından 31 Aralık 2015 tarihine kadar geçici olarak bazı meyve ve sebzeler için (badem, fındık, ceviz, antep fıstığı, kayısı, kiraz, şeftali, erik, incir, nar, sarımsak, fasulye, bezelye gibi) 50 veya 75 ppm olarak belirlendiği ancak 1 Ocak 2016 tarihi itibariyle 2 ppm olarak uygulanacağı,

- ABD ve birçok ülkenin AB'ye ihracatının bu durumdan ciddi şekilde etkilenmesinin beklendiği,

- Fosfonatı gübre olarak kullanan ülkeler tarafından AB'ye ihraç edilen ürünleri fosetil ve fosfonat açısından teste tabi tutarak verilerin Komisyona iletmesinin ABD tarafından önemli bulunduğu,

- ABD yetkililerince konuyla ilgili verilerin Komisyon'a sunularak bir çözüm sağlanmasına yönelik görüşmelerin sürdürülmesinin hedeflendiği, ancak bu süreçte ihracatın etkilenmemesi için 31 Aralık 2015 tarihine kadar geçici olarak uygulanan 75 ppm seviyesindeki limitlere ilişkin sürenin uzatılmasının talep edildiği,

- ABD'nin anılan uygulamadan etkilenebilecek üçüncü ülkeler ile işbirliği yapmak istediği ve üçüncü ülkelerin de test sonuçlarını AB ile paylaşmasının ve konuya ilişkin taleplerini gündeme getirmesinin ABD tarafınca önem arz ettiği

gibi hususlar gündeme gelmiştir.

Bilgileri ve söz konusu gelişmelerin ilgili İhracatçı Birlikleri'ne iletilmesi hususunda gereğini rica ederim.

GÜVENLİ ELEKTRONİK İMZALI ASLI İLE AYNIDIR
06-07-2015
Durmuş BAKIR
Bil. İşl.

T.C. Ekonomi Bakanlığı İhracat Genel Müdürlüğü
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Ayşegül ŞAHİNOĞLU YERDEŞ
Bakan a.
Daire Başkanı

EK:
fosfonat sunumlar

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Almond Board of California

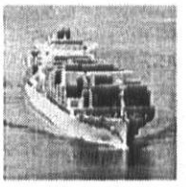
Phosphonate (Phosphite) Situation in the EU

18.6.15

Gabriele Ludwig, Ph.D.
Director, Sustainability & Environmental Affairs

California Tree Nut Coalition

- Comprised of almond, walnut, pistachio boards, nut handlers, DFA of CA and USDA-ARS.
- Primary goals:
  - Assess the residues in California tree nuts.
  - Prevent trade disruptions (short-term solution).
    - Temporary MRL
  - Obtain a long-term solution.
    - Permanent MRL?
    - Import tolerance?
    - Phosphonate-specific?



CALIFORNIA PISTACHIOS
ADMINISTRATIVE COMMITTEE for PISTACHIOS

CALIFORNIA Walnuts

california almonds
Almond Board of California

What the !#?! is phosphonate/phosphite/phosphonic acid?

Phosphonate aka: **phosphite, phosphonic acid, phosphorous acid** or PO_3 is a molecule that can be easily absorbed by plants and moves around inside the plant.

It is sold as both fertilizer and fungicides to a wide range of crops.

- It is typically attached to an ion such as potassium, calcium, zinc, etc. or to more complex molecules
  - Fosetyl-aluminum (fosetyl-Al) is fosetyl-Al molecule attached to phosphonate. It is a registered fungicide.
- it is used to help get micro-nutrients such as Ca, Zn, Mg into plants.
- It is also contributes to root health through an uncertain mechanism
  - Definitely helps with Phytophthora infections
  - Could be direct fungicide
  - Could be a plant growth regulator by enhancing root growth
  - Could be a biostimulant that stimulates the resistance to disease mechanism in the plant.
- Phosphate ≠ phosphonate.

Phosphate (PO_4) aka phosphoric acid is a key plant nutrient and key building block to all cells.

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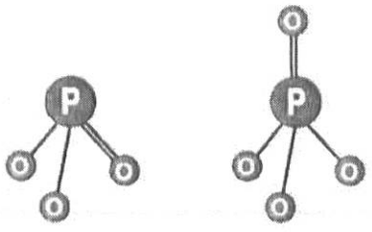
Phosphonate (PO_3) vs Phosphate (PO_4)

Figure 1
The Phosphate Ion has one more oxygen atom than the Phosphite ion. Commercial formulations have ions combined with other elements (e.g. Iron, Potassium, Aluminium)



The Phosphite Ionic Compound | The Phosphate Ionic Compound

Conventional phosphate fertilizers typically have the phosphate component (PO4) bound to additional elements such as iron or hydrogen. Phosphite compounds also have the phosphite component (PO3) bound to additional elements such as potassium or aluminium. The different effects of these two compounds on crops is remarkable given that they are chemically very similar.

http://www.questproducts.us/fertilizersPhosphiteStory.php

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Why are we talking about it?
(and reminding you of long forgotten chemistry classes...)

- The EU fairly recently clarified that any phosphonate residue in food stuffs would be treated as a pesticide and therefore requires a maximum residue limit (MRL)
- The EU is using the long established MRLs for fosetyl-Al to cover any phosphonate residues
  - There is no way to distinguish whether the phosphonate measured came from fosetyl-Al or potassium phosphonate, etc.
- Phosphonate containing products are sold as fertilizer and as pesticides around the world
- However, for a number of crops there is no fosetyl-Al MRL established.
  - Have a default MRL of 2 ppm in the EU

➔ Trade disruption of agricultural products treated with phosphonates if sold in the EU market and don't have a fosetyl-Al MRL.

➢ EFSA finds no health risks with phosphonate
➢ EPA has exempted KPO3 from a tolerance due to low dietary risk

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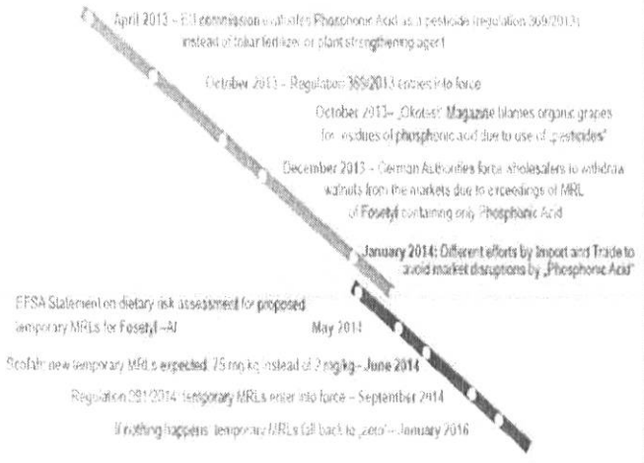
Fosetyl Al (Aliette) and Phosphonic Acid (Phosphite) in Europe

- EU decided KPO3 is a fungicide in 2013
- Using existing Fosetyl-Al MRLs – as common metabolite: phosphite
- However, FA has no tree nut MRL, as never registered for bearing crops.
- November 2013, walnut detect ➔ recall
- EU temporary MRL through Dec 31, 2015
- Meet default MRL after that
- Setting up residue trials with IR-4



almonds
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Status of Fosetyl Al MRLs in the EU

Crops with temporary MRL (reverts to 2 ppm 1.1.2016)	
tree nuts	75
stone fruit	75
cane berries	75
blue-, goose-berries, currents	75
figs	75
pomegranates	75
garlic	50
beans & peas	75
asparagus	50
papayas	75

Crops with default MRL of 2 ppm
cranberries
dates
olives
sweet potato /yam
root vegetables
pulses
cereals
Oil seeds
Oil fruits (e.g olive)
banana
mango, guavas, litchi,
okra
shallots
cocoa

Crops with MRL (ppm)			
citrus	75	Brassica	10
pome fruit	75	chard	15
grapes	100	pineapple	50
strawberries	75	tea/coffee herbal infusions (ginger, hibiscus, etc)	5
kiwi	150		500
avocado	50	spices	400
potato	30	lettuces/ leafy vegetables	75
onion	50	hops	1500
tomato	100	cucumber	75
peppers	130		

Why have you been invited?

- It seems that phosphonate is widely sold around the world as both a fertilizer and/or a pesticide.
- Many users are likely still unaware that if they sell their produce into the EU, their fertilize/fungicide use is considered a pesticide and they may fail to meet the EU fosetyl-Al standards.

Australia:
1. KPO3 e is registered only as a pesticide, not as fertilizer
3. Registered for use on most horticultural crops, vegetable & tree. Not registered for cereals.

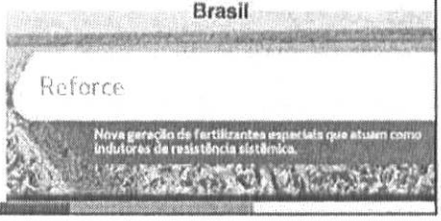
Israel

Haifa ProteK™
Potassium Phosphite / Phosphate

In **South Africa** a registration needs assessment for berries in 2014 noted: Potassium phosphite – low priority as registered as fertilizer

Liquid fertilizers containing phosphonate chemical groups have been used in **Jordan**. Some of these fertilizers have a fungicidal effect, as well. Phosphonate groups belong to the phosphite family which is a dissociated form of the phosphorus acid. I

Brasil



Chile and other South American countries

FOSFIREND® Doble Acción Fosfito de Potasio "Plus"

Aplicaciones Foliares: Aplicar 16 a 24 litros por hectárea, distribuidos en 4 a 6 aplicaciones de 4 a 5 litros/hectárea/aplicación. Diluir entre 0,5% al 0,8%, dependiendo del mojamiento que se utilice.

Cultivo	Dosis cc / 100 l	Número de Aplicaciones	Momentos de aplicación	Forma de aplicación
Vid Vinífera y Vid de mesa	500 a 800	3 a 6	A partir de brotes de 20 cm, cada 15 días.	Asperjado foliarmente
Limonero, Naranjo, Clementinas	500 a 800	3 a 6	Con brotes en activo crecimiento (primavera y otoño) cada 15 días.	
Duraznero, Nectarino, Damasco, Cerezo	500 a 800	3 a 6	Desde fruto recién cuajado, repetir cada 15 días.	
Manzano, Peral	500 a 800	3 a 6	Desde caída de pétalos, cada 15 días.	
Arándano, Frambuesa, Frutilla, Mora	500 a 800	3 a 6	Antes y después de floración, cada 15 días.	
Hortalizas, Tomate, Papas	500 a 800	3 a 6	15 días después del trasplante, cada 15 días.	
Olivos	500 a 800	3 a 6	Desde inicio de cuaja de frutos.	
Melón, Sandía	500 a 800	3 a 6	Desde inicio de cuaja de frutos.	

Actions to Consider if Export Food to the EU

1. Determine if potassium or other forms of phosphonate/phosphite are sold and used as a fertilizer or fungicide in your country
2. Determine if growers/crops that export to the EU use phosphonate products
3. Determine if those crops have a fosetyl-Al MRL or only a default/temporary MRL
4. If only a default MRL, then that crop may face a trade barrier in the EU until an import MRL can be established.
5. Develop and share monitoring residue data (see Tom's presentation)
6. If exceed 2 ppm, then need to work to develop residue data to establish a import MRL in the EU for that crop
7. Consider communicating to the EU authorities both the trade impact and any steps being taken to resolve the matter for that crop.
   - The EU needs to consider **the time** to develop data needed for import MRL to avoid trade disruptions.

california almonds
Almond Board of California

DFA Of California

EU Regulation on Phosphonates and Fosetyl: Compliance Challenges for Producing Countries.

Thomas Jones
Laboratory Director, DFA of California
June 18, 2015

DFA Of California

Who is DFA?

- A trade association of dried fruit and tree nut processors.
  - Founded in 1908.
  - Many brands you recognize!
- Core areas of activity:
  - Food safety audits.
  - Commodity inspection.
  - Laboratory testing.

DFA Of California

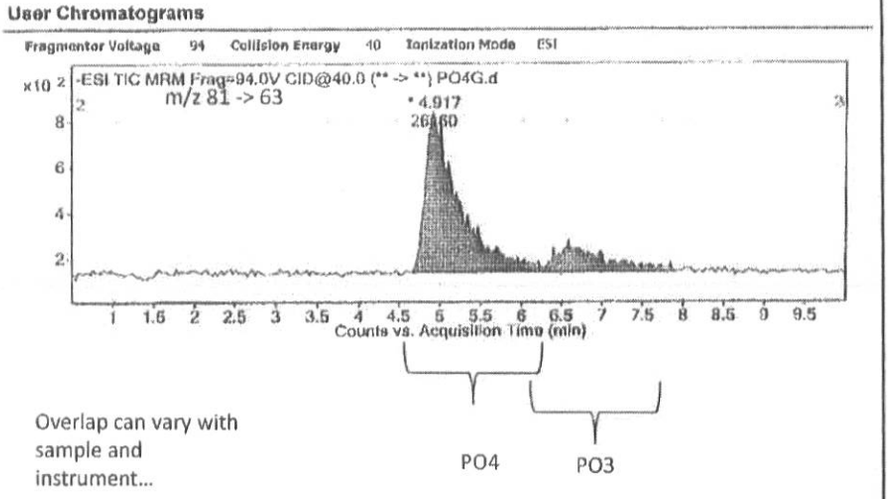
Methods of Analysis

- We attempted to repeat German results with EU method M1.3.
- Sample preparation for nuts was not specified:
  - High fat is a challenge/low recoveries.
- Hypercarb™ column challenges:
  - Retention time shifts as column degrades.
  - Makes isolating the phosphite very difficult.
- Greatest challenge: how do we distinguish phosphite (PO_3) from phosphate (PO_4)?

USDA ARS

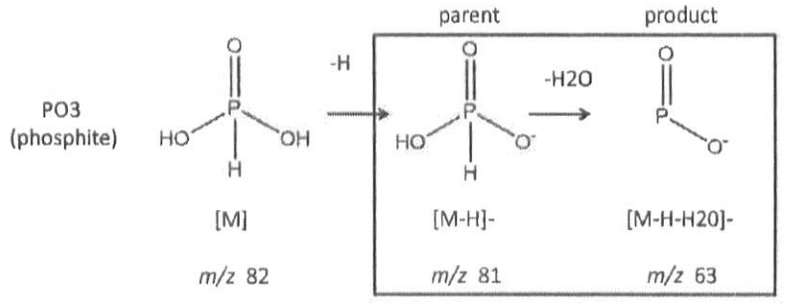
DFA Of California

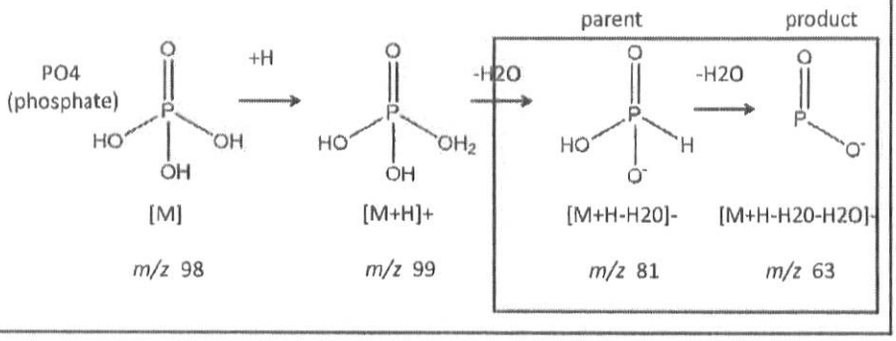
Results: PO_4 & PO_3 Interference



Overlap can vary with sample and instrument...

EU Methods: No spectrometric resolution in (-) mode!





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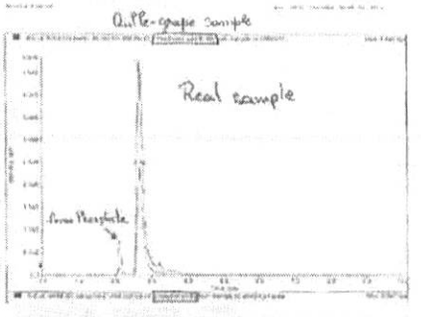
EU Response

- Never tested for phosphate.
- Claimed good resolution of PO3/PO4 upon analysis:
  - Different retention times.
  - Used grape sample.
  - $[PO_4] < [PO_3]$
  - Not our experience in nuts.
  - Fruit samples work better.



USDA ars

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DFA/USDA Method

- Poor results with nut analysis (almonds, walnuts, pistachios) on M1.3.
  - Substantial PO_4 levels from other sources (ethephon?)
- Developed from EU Method 1.2.
  - Dionex IonPac column.
- Modifications:
  - Isocratic method.
  - 10 mM NH4 acetate/ aq. formic acid (0.01% v/v).
  - Positive ion mode.
  - Agilent 6430 Triple-Quad LC MS/MS

USDA ars

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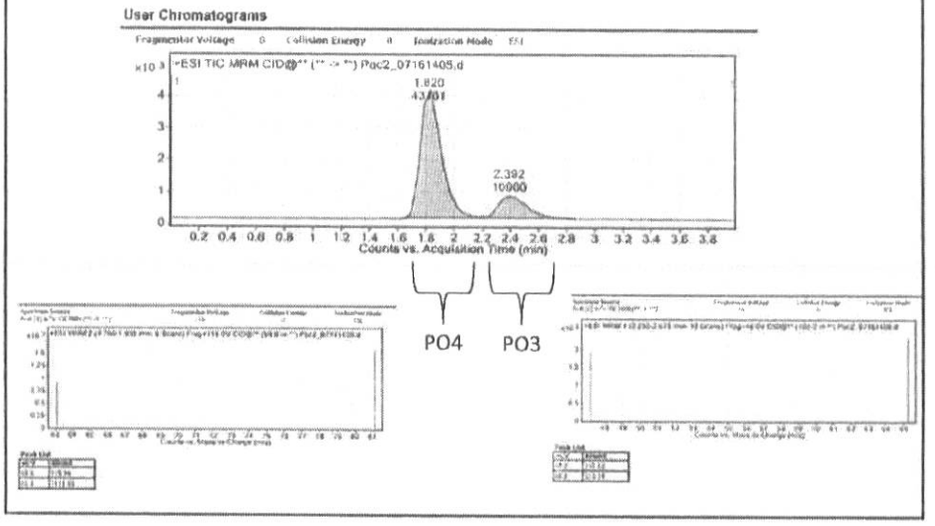
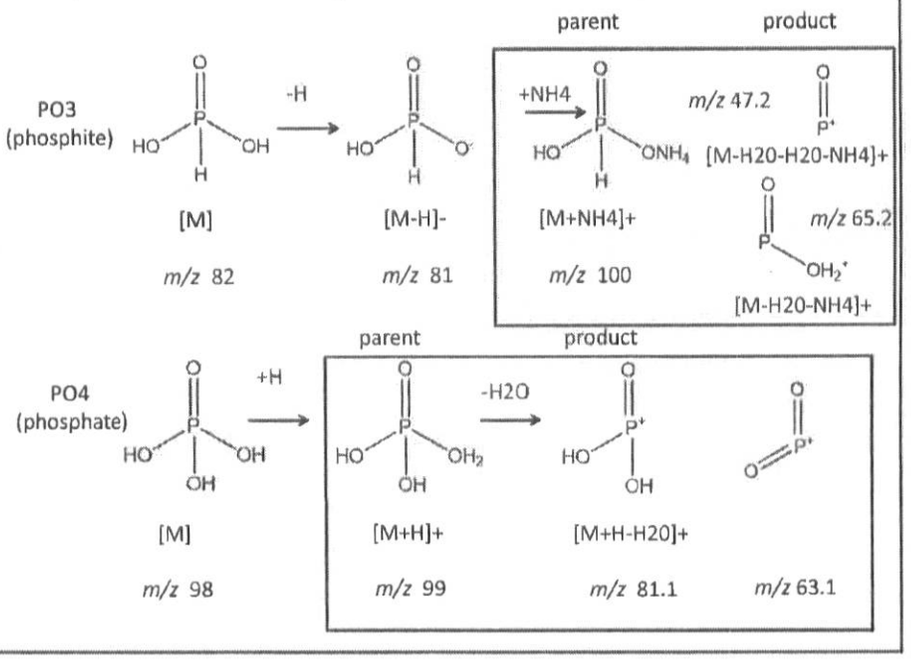
Results: separation of PO_3 & PO_4



DFA/USDA Method: Spectrometric resolution in (+) mode



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2014 Tree Nut Data

Commodity	Sample #	Phosphite (PO_3)	Phosphate (PO_4)
Almond	38	ND – 11.7 ppm	3.7 – 51.8 ppm
Walnut	31	ND – 2.2 ppm	3.7 – 19.3 ppm
Pistachio	37	ND – 1.8 ppm	2.8 – 39.3 ppm

Limit of Detection (LOD) = 0.5 ppm (PO_3), 0.25 ppm (PO_4).

Data obtained in almonds (n=10) with the GC-FPD method yielded PO3 values of ND – 23.5 ppm (source: Almond Board of California).

Coalition Research Activities

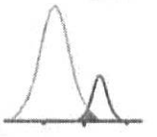
- Research funding has been obtained:
  - USDA Technical Assistance for Specialty Crops (TASC).
- Collaborators include:
  - UDSA Agricultural Research Service
  - DFA of California
  - Johns Hopkins University
  - IR-4 (EPA/USDA/SAES)
  - Commodity boards, INC

Research Objectives

- ***Survey of Commodity Residues:***
  - Cooperation with INC, Nofalab
  - Effects of cultural practices
  - Survey nut samples from around the world.
- ***Phosphorous Acid Formation/Elimination:***
  - Cooperation with Johns Hopkins.
  - Reactions within soil/orchard environment.
  - Effects of other inputs (phosphine?).

Research Objectives

- ***Residue Trials:***
  - Establish a permanent MRL/import tolerance.
  - Almonds, walnuts and pistachios.
  - Use a registered fungicide.
    - Use maximum label rates.
- ***Methods Development:***
  - Optimize the analysis of PO_3.
  - Comparison between labs.
  - Compare EU & DFA/USDA methods.

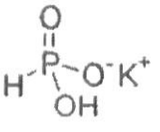


Phosphonate and Fosetyl-Al Results by DFA Method and EU Method M1.3

	DFA/USDA Method		EU Method M1.3	
Sample #	Fosetyl-Al (mg/kg)	Phosphonate (mg/kg)	Fosetyl-Al (mg/kg)	Phosphonate (mg/kg)
1	None Detected	8.5	None Detected	5.0
2	None Detected	3.5	None Detected	13.0
3	None Detected	3.1	None Detected	4.3
4	0.02	None Detected	0.04	12.5
5	None Detected	None Detected	None Detected	None Detected
6	None Detected	None Detected	None Detected	0.4
7	None Detected	None Detected	None Detected	None Detected
8	None Detected	3.7	None Detected	6.7
9	None Detected	1.4	None Detected	11.2
10	None Detected	None Detected	None Detected	None Detected
11	None Detected	2.3	None Detected	2.9
12	None Detected	7.7	None Detected	55.2
13	None Detected	None Detected	None Detected	None Detected
14	None Detected	None Detected	None Detected	None Detected
15	None Detected	4.1	None Detected	26.8
16	None Detected	2.7	None Detected	6.7
17	None Detected	None Detected	None Detected	0.3
18	None Detected	None Detected	None Detected	None Detected

Methods Status

- Continuing refinement of the DFA/USDA method:
  - Sample preparation
  - Testing the method in additional labs.
  - Plan to publish method in late 2015.
- Exploring additional techniques:
  - Capillary electrophoresis (CE)-MS/MS?
- EU Method Revised (Version 8, March 2015):
  - Acknowledge PO4/PO3 interference.
  - Sample preparation, spectrometric resolution still not addressed.



Summary Remarks

- Existing methods employed by EU laboratories do not adequately resolve phosphite (PO_3) from phosphate (PO_4).
- This lack of resolution can combine with the fosetyl-Al MRL definition to cause product rejections well below the established MRL.
- The analytical methods currently under development will provide a more reliable measure of PO_3.

DFA Of California

More data is needed!

- From all growing regions.
  - This is not simply a "California issue".
  - This is not just a tree nut issue.
- For all of the impacted commodities:
  - Blueberries, cherries (t MRL).
  - Cranberries (default MRL).
- The EC bases their MRL decisions on data.
  - No data = no extensions of t MRLs, no new MRLs!

DFA Of California

Acknowledgements

- Spencer Walse & Wiley A. Hall
  USDA-Agricultural Research Service
  San Joaquin Valley Agricultural Sciences Center
  Parlier, CA
- Bill Beckham
  DFA Laboratory, Fresno, CA
- Alan T. Stone
  Johns Hopkins University
  Whiting School of Engineering.

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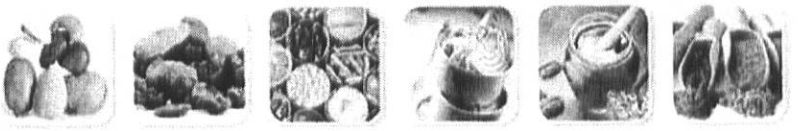

EUROPEAN FEDERATION OF THE TRADE IN DRIED FRUIT & EDIBLE NUTS • PROCESSED FRUIT & VEGETABLES • PROCESSED FISHERY PRODUCTS • SPICES • HONEY

Mr. Volker Wachtler
European Comission
DG Health and Consumers – Unit SANCO/E3
Rue de la Loi 200
B – 1049 Brussels

Brussels, 25/03/ 2014

Increased temporary Fosetyl-Al and/or phosphonic acid MRL for tree nuts and fruits from which dried fruits derive

Dear Mr. Wachtler,

We refer to your email sent on 24 March 2014 following up the meeting on fosetyl-Al /phosphonic acid MRLs between DG SANCO and the Frucom[1]-Freshfel delegation on 17 March 2014. We thank you for considering the request we made at that meeting and for reflecting on the possibility to set temporary maximum residue levels (MRLs) for phosphonic acid in certain products.

Phospourous acid was detected for the first time in Germany by the laboratory CVUA Stuttgart in inshell walnuts from the United States at the end of 2013. Even though only Phospourous acid was found, it was assumed by the authorities that the pesticide Fosetyl-Al had been used and the MRL of 2 ppm (Regulation (EC) No. 396/2005) was applied. As the result exceeded 2 ppm the product was taken off the shelves.

Even though only Phospourous/phosphonic acid was found, the German authorities assumed that the pesticide Fosetyl-Al had been used and the MRL of 2 ppm (Regulation (EC) No. 396/2005) was applied. As the result exceeded 2 ppm the product was taken off the shelves. Subsequently, the German companies involved in the trade with nut kernels and inshell nuts started to analyse their products. Some of this data is attached to this paper.

In the attached data, **fosetyl-Al residues exceeding the current MRL can be found in a wide range of tree nuts (almonds, walnuts, pistachios, macadamia and cashews) and few dried fruits (dried raspberries and prunes) from a wide range of origins - EU and non-EU.** *Please cautiously consider the information on the origins of the attached data since the origins of the products are indicated for less than 50 % of the samples analysed.*

In Europe, fosetyl-Al use in tree nuts and some fruits used for dried fruits including stone fruits and berries is currently prohibited. In California, one of the larger EU suppliers of almonds, walnuts and pistachios, fosetyl-Al use is restricted to very limited cases on non-bearing almonds trees and cannot be used for walnuts and pistachios. Therefore, we assume that phosphonic/phosphorous acid can be found because of other sources than the use of the pesticide

[1] The FRUCOM delegation included the Waren-Verein – German National association member of FRUCOM and the INC, The International Nut and Dried Fruit Foundation – affiliated member of FRUCOM

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fosetyl-Al. These other sources still need to be further investigated and we welcome EFSA being commissioned to assess a proper phosphonic/phosphorous acid EU MRL.

However, this procedure will take time and **FRUCOM members need a short term solution. An important proportion of tree nuts, dried stone fruits and dried berries and their derived products might not comply with the current EU fosetyl-Al MRLs and could be taken immediately off the supermarket shelves or not being authorised to be used by the food industry. This could lead to important trade distortions as well as food supply chain disruptions** *(See Annex II).*

Therefore FRUCOM urges the Commission to set temporary MRLs for treenuts, as well as stone fruits and berries used for dried fruits especially for the ones where data supports this request for the time being. These products are indicated in the Annex I to this document. **We recommend setting the temporary MRLs at a level of 75 ppm since this level does not represent a toxicological risk for consumers.** This level has been set for several commodities, including for citrus fruit and pome fruit which are more consumed than tree nuts, stone fruits and berries. A level of 100 ppm has even been set for Table and wine Grapes.

We thank you for giving to our concerns the appropriate consideration and finding a short term solution.

Sincerely,

Cristina Moser
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Tel direct: +32 (0)2 230 03 33

FRUCOM officially represents European traders, importers, agents, brokers and industrial operators in a wide range of products including dried fruits and edible nuts. Founded in 1960, FRUCOM represents the common interests of more than 300 companies across the EU. Further information about the association can be found in our website www.frucom.eu.

ANNEX I: Products of plant origin requiring an increase of fosetyl-Al MRLs according to the data collected so far

(*) Indicates lower limit of analytical determination

Code	Groups	Individucal products to which MRLs apply	Current Fosetyl-Al (sum fosetyl + phosphorous acid and their salts, expressed as fosetyl) MRL (ppm)	Suggested MRL (ppm)
0100000	Fruit, Fresh, Frozen;Nuts			
0120000	(ii) Tree nuts			
120010		Almonds	2*	75
120030		Cashews	2*	75
120060		Hazelnuts (Filbert)	2*	75
120070		Macadamia	2*	75
120100		Pistachios	2*	75
120110		Walnuts	2*	75
0140000	(iv) Stone fruit			
0140040		Plums	2*	75
0150000	(v) Berries and small fruit			
0153030		Raspberrries	2*	75

ANNEX II: Statistics about tree nuts

Although historically Europe is a producer of tree nuts, nowadays, European production of tree nuts does not meet European demand. European consumption of tree nuts depends heavily on imports. Approximately 80 % of tree nuts consumed in the EU are imported. Last year, EU imports of tree nuts totalled almost 700 000 MT. Almost 30 % of the EU tree nut total imports are comprised of almonds and another 15 hazelnuts[2].

Most imported tree nuts are imported as raw material which are further processed and/or packaged in Europe. The European food processing industry including the confectionary and chocolate industry as well as the snack industry are the large users of tree nuts. Some imported tree nuts are packaged in Europe and are sold to supermarkets for direct consumption. Germany is one of main importers of US tree nuts. In Germany, the most consumed nuts are almonds (0,767 kg/capita/year in 2008), hazelnuts (0,772 kg/capita/year in 2008,), walnuts (in 2008, 0,103 kg/capita/year) and pistachios (0,093 kg/capita/year in 2008)[3].

The United States is by far the largest supplier of tree nuts to the European Union with a 30 % market share. Their market share in the EU is especially high for almonds (93 % in 2012), pistachios (73 % in 2012) and walnuts (58 % in 2012)[4].

[2] Data extracted from the 2013 USDA Gain report on Tree nuts available HERE

[3] Total consumption expressed in Kg per person. Based on 2007 population census, UN Statistics Division. Information extracted from the Nuts and dried fruits statistic review 2004-2009 available at the following link: http://www.nutfruit.org/inc-global-statistical-review-2004-2009_13635.pdf

[4] Data extracted from the 2013 USDA Gain report on Tree nuts available HERE

EUROPEAN FEDERATION OF THE TRADE IN DRIED FRUIT & EDIBLE NUTS • PROCESSED FRUIT & VEGETABLES • PROCESSED FISHERY PRODUCTS • SPICES • HONEY

Mr. Ladislav Miko
Deputy Director-General - For the Food Chain
DG SANTE
European Commission
1049 Brussels

Brussels, 29/05/ 2015

Re: Request for a prolongation of the temporary Fosetyl-Al MRL for tree nuts, as well as for stone fruits and berries from which dried fruits derive

Dear Mr. Miko,

FRUCOM is the European organisation representing European traders of nuts and dried fruits. In 2014, FRUCOM has provided information to the European Commission showing the presence of phosphorous acid[1] in tree nuts and a series of fruits used as dried fruits leading to higher residues than the EU fosetyl-al MRL for those products i.e. 2 mg/kg corresponding to the limit of determination although residues of fosetyl remain below the limit of determination.

In 2014, the Commission concluded from all the data collected from various food categories and origins that fosetyl-al residues were a consequence of the application of foliar fertiliser products containing phosphonates and not of the use of fosetyl-al pesticide. Since no risk for consumers was identified in the data collected, the Commission agreed, in order to avoid significant market disruptions in the trade of the concerned products that were treated with phosphonate-containing products, to set temporary MRLs for fosetyl-al at 75 ppm for tree nuts and a series of fruits until 31 December 2015. As mentioned in Regulation 991/2014, from 1 January 2016, the LOD of 2 mg/kg will be again applicable unless modified by another Commission Regulation.

In the letter the Commission sent us on 1/09/2014, it was mentioned that the residues due to the use of fertilisers containing phosphonate were not unavoidable. It was also mentioned that temporary levels should apply only until measures to prevent the occurrence of phosphonate residues in relevant crops in future growing seasons take effect. Moreover, the letter also mentioned that it is the responsibility of food business operators to find solutions to ensure compliance with the MRLs at 2 mg/kg in future growing seasons.

Data recently collected by our members show again that phosphorous acid is still being found in treenuts and dried fruits from various origins above the detection level of 2 mg/kg (see Annex I below and the excel table attached) **and that fosetyl is negligible.**

Most of the tree nuts and dried fruits consumed in the EU are imported. The United States is by far the largest supplier of tree nuts to the European Union with a 30 % market share (see annex II below). This is why most of the samples we collected originate from the US. However, there are

[1] EFSA speaks of renaming phosphorous acid to phosphonic acid

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many other producing countries which will also be impacted if the fosetyl-al MRL goes back to the detection level by 1 January 2016 since phosphonic acid and its ammonium, sodium and potassium salts are **legally authorised for use in their countries, either as pesticides or fertilisers.** When considered as fertilisers, the usage of phosphonic acid and its salts is not controlled or monitored in the same manner as pesticides and no residue studies are conducted to set a limit for their use in tree nuts or fruits.

In these circumstances, it is difficult for importers to force supplying countries to simply stop using these substances from one year to another. In addition, many of these producing countries are not aware that the EU is since 2013 considering residues from these compounds as part of the fosetyl-al MRL, regardless of the source. Consequently, we fear that producing countries whose products are being less controlled in the EU have not realised that they should comply with the fosetyl-al detection level MRL as from 1 January 2016 and that the issue will keep growing after that date.

Not so long ago, before October 2013, the EU also did not consider these substance as pesticides. According to the EU EGTOP report published in April 2014[2], before October 2013, potassium phosphonates were never explicitly authorised for organic farming, neither as pesticide nor as fertilizer. Potassium phosphonates were listed as plant strengtheners for many years in countries like Germany and could be legally used in organic farming without explicit listing in Regulation 889/2008 (Art. 16 of Reg. 834/2007). Other phosphonates (Na, NH4 and Ca) were also marketed as fertilizers. The aim of the **EGTOP report issued in 2014 was even to consider the possibility to authorise the use of potassium phosphonate in organic production so as to decrease the use of copper since potassium phosphonate does not pose any inacceptable impact on the environment and human health (consumer & operator).** At this point, we do not know if all EU Member States are fully aware of the Commission's regulatory change related to potassium phosphonates, and if all use as fertilizers by European growers has been discontinued.

Furthermore, we are well informed that this year the US tree nut industry (almonds, walnuts and pistachios) is conducting extensive field trials and residue survey on US crops in order to generate the necessary data to establish an appropriate import tolerance for phosphonate in tree nuts in the future. However, it will take several years not only to complete the research, but also to secure acceptable import tolerances at EU level. The International Nut and Dried fruit Council (INC) is also expected to share soon with you the results of their analyses on samples of different tree nuts from various origins.

Since EU Fosetyl-al MRLs have already been set for citrus and grape, we are wondering if some tree nuts or dried fruit EU producing countries like Spain, Italy, France and Greece might have an interest in using phosphonates at European level. If this is the case, **a fosetyl-al EU MRL above the detection level would then be much more appropriate than an import tolerance.**

[2] Source: Expert Group for technical Advice on Organic Products (EGTOP) Final report on plant protection products adopted at the 9th plenary meeting of 28-30 April 2014 – Available at the following link: http://ec.europa.eu/agriculture/organic/eu-policy/expert-advice/documents/final-reports/egtop-final-report-on-ppp-ii_en.pdf

It is thus a matter of 2-3 years before the import tolerances would be established. More time is necessary to collect views of the EU 28 Member States about the necessity of an EU fosetyl-al MRL for nuts and dried fruits rather than an import tolerance. In the meantime, FRUCOM urges the Commission to extend the temporary fosetyl-al MRLs set at 75 ppm in Regulation 991/2014 for tree nuts, as well as stone fruits and berries used for dried fruits until these import tolerances or EU MRLs would be set. As demonstrated by the EFSA statement published in May 2014[3], these levels do not represent any toxicological risk for consumers. These levels are equal or even lower than the MRLs previously set for a series of fruits (incl. citrus, grapes), which are much more consumed than tree nuts and dried stone fruits and berries.

Otherwise, an important proportion of tree nuts and dried fruits and their derived products might not be able to comply with the MRL of 2 mg/kg and will therefore no longer be authorised for import into the EU or will have to be taken off supermarket shelves across the EU from 1 January 2016. In addition to creating huge costs to importers and manufacturers, this will also create food supply chain disruptions that will ultimately harm the EU food industry that relies on the supply of these goods (such as chocolates, snacks, bakery industry etc.) since it is unclear which producing countries may be using these compounds without being fully aware of their somewhat recent regulatory status in the EU.

We would also like to stress that there is no provision about a transition period from 1 January 2016 for the exhaustion of stock of nuts and dried fruits which have been produced taking into account that the fosetyl-al MRL of 75 ppm was acceptable according to Regulation 991/2014.

We thank you for giving to our concerns the appropriate consideration and for your efforts in helping to find with all the operators, suppliers and industries concerned in the EU a mutually beneficial solution.

Sincerely,

Cristina Moser
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cmoser@frucom.eu
Tel direct: +32 (0)2 230 03 33

Cc: M. Flueh, A. Bitterhof, V. Wachtler, B. Kilgallen (SANTE); H. Joostens (TRADE); J. Bernsel, V. Delvaux, E. Liégeois (ENTR); H. Joostens , Z. Somogyi (TRADE); S. D'Acunto (Grow)

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[3] EFSA Statement on dietary risk assessment for proposed temporary MRLs for fosetyl-al available at the following link: http://www.efsa.europa.eu/en/efsajournal/pub/3695.htm

ANNEX I: Samples of nuts and dried fruits where residues of phosphorous acid have been found above the detection level of 2 mg/kg

The data below has been extracted from the data collected by our members and which is attached to this letter. According to that data, around **50 % of the analysed dried fruits and nuts (44 samples out of 85) exceed the detection level of 2 mg/kg but remain below 75 mg/kg.**
Please cautiously consider the information on the origins of the attached data since US the major supplier of almonds, pistachios and walnuts to the EU.

Products (Matrix)	Origin	Testcode	Phosphorous acid [mg/kg]	Fosetyl-Al (sum fosetyl + phosphorous acid and their salts, express as fosetyl) (mg/kg)	MRL Fosetyl mg/kg till 31.12.2015	MRL Fosetyl mg/kg ((VO (EG) 396/2005) from 1.1.2016
Almond			11.2		75	2*
Almond			10.6		75	2*
Almond			9.5		75	2*
Almond	USA		5.9		75	2*
Almond			16.5		75	2*
Almond			3.0		75	2*
Almond			3.2		75	2*
Almond			4.4		75	2*
Almond			2.8		75	2*
Almond			2.5		75	2*
Almond			3.9		75	2*
Almond			6.7		75	2*
Almond			11.2		75	2*
Almond	USA		2.8		75	2*
Almond			4.3		75	2*
Almond, blanched	USA		6,6		75	2*
Almond, harvest 2014	USA		16,4		75	2*
Almond, harvest 2014	USA		3,6		75	2*
Almond, shelled	USA		16,6		75	2*
Blueberry - Dried	Canada	FRUCOM 01	3,8	5,1	75	2*
Cranberries, dried			12,10		75	2*
Macadamia, raw, shelled	Australia		14,00		75	
Nut			3.2		75	2*
Nut			5.6		75	2*
Nut			2.5		75	2*
Nut			3.1		75	2*
Nut			22.0		75	2*
pistachio	U.S.A.		2.0		75	2*
pistachio	U.S.A.		4.4		75	2*
pistachio	U.S.A.		4.8		75	2*

Products (Matrix)	Origin	Testcode	Phosphorous acid [mg/kg]	Fosetyl-Al (sum fosetyl + phosphorous acid and their salts, express as fosetyl) (mg/kg)	MRL Fosetyl mg/kg till 31.12.2015	MRL Fosetyl mg/kg ((VO (EG) 396/2005) from 1.1.2016
pistachio			7.4		75	2*
pistachio	U.S.A.		9.3		75	2*
pistachio			3.0		75	2*
Pistachios- whole roasted			2.3		75	2*
Pistachios- whole roasted			3.0		75	2*
Pistachios- whole roasted			3.3		75	2*
Walnut	USA		7.7		75	2*
Walnuts			2.0		75	2*
Walnuts			3.3		75	2*
Walnuts			11.9		75	2*
Walnuts			54.0		75	2*
Walnuts			14.8		75	2*
Walnuts	USA		15.7		75	2*
Walnuts			4.0		75	2*

ANNEX II: Statistics about tree nuts

Although historically Europe is a producer of tree nuts, nowadays, European production of tree nuts does not meet European demand. European consumption of tree nuts depends heavily on imports. Approximately 80 % of tree nuts consumed in the EU are imported. In 2012, EU imports of tree nuts totalled almost 700 000 MT. Almost 30 % of the EU tree nut total imports are comprised of almonds and another 15 hazelnuts[4].

Most imported tree nuts are imported as raw material which are further processed and/or packaged in Europe. The European food processing industry including the confectionary and chocolate industry as well as the snack industry are the large users of tree nuts. Some imported tree nuts are packaged in Europe and are sold to supermarkets for direct consumption. Germany is one of main importers of US tree nuts. In Germany, the most consumed nuts are almonds (0,767 kg/capita/year in 2008), hazelnuts (0,772 kg/capita/year in 2008,), walnuts (in 2008, 0,103 kg/capita/year) and pistachios (0,093 kg/capita/year in 2008)[5].

The United States is by far the largest supplier of tree nuts to the European Union with a 30 % market share. **Their market share in the EU is especially high for almonds (93 % in 2012), pistachios (73 % in 2012) and walnuts (58 % in 2012)[6].**

[4] Data extracted from the 2013 USDA Gain report on Tree nuts available HERE

[5] Total consumption expressed in Kg per person. Based on 2007 population census, UN Statistics Division. Information extracted from the Nuts and dried fruits statistic review 2004-2009 available at the following link: http://www.nutfruit.org/inc-global-statistical-review-2004-2009_13635.pdf

[6] Data extracted from the 2013 USDA Gain report on Tree nuts available HERE

EK3

Bahar Güçlü

From:	Vandercammen, Gerda (USEU) <Gerda.Vandercammen@fas.usda.gov>
Sent:	23 June 2015 13:31
To:	Bahar GÜÇLÜ; Chris Leggett; David Reid; Didier Wauters; Fernando Mehler; Jeremy Belzunces; Russell Phillips; Thapsana MOLEPO; Valeria Csukasi; Abhi Kulkarni; Christine Moser; Gabriele Ludwig; Giuseppe. Calcagni; Goretti Guasch; Helena Melnikov; Jorge de Saja; Lieven Plets; Neale Bennett; Romans Vorss; Ross Skinner - Almond Board of Australia; Sam Keiper - DFA of California; Tom Jones - DFA of California; Shiraz Dromi Zernitsky; Barbara Quinones; Luis Olivares Pflücker; Anne MacMillan
Cc:	De Belder, Tania W (USEU); Rondon, Marcela E (USEU)
Subject:	June 18 FAS/USEU Policy Breakfast on Phosphonate Residues - Background Documents
Attachments:	ABC Fosetyl_Factsheet.pdf; Ludwig Phosphite Situation in the EU 18.6.15.pptx; Jones FAS Phosphonates and Fosetyl Presentation June 2015.pptx; FRUCOM Postion_Fosetyl_25March2014.pdf; FRUCOM Postion_Fosetyl_29.05.2015.pdf
Follow Up Flag:	Follow up
Flag Status:	Flagged

Dear All:

On June 18, FAS/USEU hosted a policy breakfast on trade issues related to phosphonate residues, which in the EU count towards the Maximum Residue Level (MRL) for fosetyl-Al. Third country officials, the U.S. tree nut industry, and EU import association representatives participated in the event. The objective was to raise awareness about the legal uncertainty related to the trade of many products that traditionally have been grown using phosphonate based products. So far, this has not caused a problem for other exporting countries, but this situation could change rapidly based on the U.S. experience. The immediate goal of this meeting was to seek third country support for a further extension of the temporary EU MRL for fosetyl. U.S. industry representatives from the Almond Board of California shared their experiences and Dried Fruit Association (DFA) of California focused on the outstanding issues with the analytical methods used in the EU, which tend to inflate the reported levels. The current extension of the temporary MRL for fosetyl lapses on December 31, 2015.

The attached documents provide more details on this issue:

- Factsheet on Phosphite Containing Products prepared by the Almond Board of California
- Breakfast Presentation: Phosphonate/Phosphite Situation in the EU - Gabriele Ludwig, Almond Board of California
- Breakfast Presentation: EU Regulation on Phosphonates and Fosetyl: Compliance Challenges for Producing Countries - Tom Jones, DFA of California
-
- 2014 and 2015 Position papers by FRUCOM, the EU umbrella organization representing EU dried fruit and nut importers

We hope that you will also be able to provide to the Commission monitoring data on levels of Fosetyl-Al and phosphonates for products you export to the EU using the methodology discussed in the meeting. We understand that the Commission would consider these data to support a further

extension of the current fosetyl MRL, thus avoiding a period of legal uncertainty both for exporters and importers until a definitive solution is worked out for this issue.

As mentioned during the meeting there is some urgency to the matter. The next Standing Committee on Plants, Animals, Food and Feed (PAFF Committee) meeting where the matter will be discussed by the Commission and EU Member States will take place on 21-22 September. In order for a timely extension of the December 31, 2015 deadline of the temporary MRL for fosetyl, a further extension would need to be voted at the September PAFF Committee meeting.

We hope the meeting was only the start of our networking on this issue. Please let us know if you – also those who could not make it to the event - have any further questions or comments. Gabriele Ludwig and Tom Jones who made the presentations last week are obviously also still available for specific technical questions.

Best Regards,

Gerda Vandercammen
U.S. Mission to the EU – Foreign Agricultural Service
Tel: (32-2) 811 5627 – Fax: (32-2) 811 55 60
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california almonds
Almond Board of California

factsheet • june 2015

Use of Phosphite-Containing Products in 2015

In late 2013, the European Union (EU) changed the definition of phosphite from both a fertilizer and pesticide, to only a pesticide. Instead of establishing a separate Maximum Residue Limit (MRL) for phosphite-containing products, these residues are grouped with the limit established for the pesticide fosetyl-AL – which is not approved for use in the U.S. on bearing tree nuts. In the U.S. phosphite containing crop inputs can be fertilizers, pesticides, as well as adjuvants.

Background

The awareness of this change in definition of phosphite in the EU arose when a German state lab tested some U.S. walnuts in late 2013 from a retail shelf and reported fosetyl-AL residues exceeding the limit. The large retailer initiated a voluntary recall which resulted in questions to suppliers of other tree nuts.

For tree nuts, the default MRL is only 2 parts per million (ppm), which is the limit of detection. The default MRL is due to fosetyl-AL (Aliette) not being registered for bearing use on tree nuts, thus there hasn't been a need for a MRL. However, with the changed definition in the EU, any phosphite residues in tree nuts may cause trade issues.

Temporary Measures

The California tree nut industries along with the EU trade and U.S. government raised these concerns with the EU. This led to the EU setting a temporary MRL of 75 ppm for tree nuts and several other crops in 2014. European Food Safety Authority (EFSA) performed a dietary risk assessment of the proposed temporary MRLs for fosetyl-AL and concluded it is not likely to pose a consume health risk.

The temporary MRL expires December 31, 2015 and the MRL reverts to 2 ppm. If the temporary MRL is not extended, 2015 crop sold to the EU or on the retail shelf in the EU after January 1, 2016 is potentially at risk if there are residues exceeding 2 ppm.

In conjunction with the International Tree Nut & Dried Fruit Council (INC), monitoring data is being gathered from various origins of nuts and analyzed in both California and Europe. In addition, analytical methods are being reviewed to address differences in quantification and field trials on California almonds, pistachios and walnuts are being initiated in 2015. This data will be used to determine an appropriate MRL.

The Almond Board of California, Administrative Committee for Pistachios and the California Walnut Board have been working with DFA of California and USDA researchers over the past year to resolve this matter.

In June, preliminary information has been presented to the Commission to support the request for an extension of the temporary MRL. This extension will allow the necessary residue trials to be completed, data analyzed, and an application to be submitted for a permanent MRL or tolerance for phosphite. A vote by the Standing Committee, in June or at its September meeting, will be needed to extend the temporary MRL beyond December 31, 2015.

European industry organizations as well as other countries have confirmed this issue impacts more than U.S. tree nuts, and that an extension of the temporary MRL is necessary. Meantime U.S. industry members are in regular communication with U.S. government representatives to keep them advised of the situation and to emphasize the potential for trade disruption.

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EUROPEAN COMMISSION
HEALTH AND CONSUMERS DIRECTORATE-GENERAL

Directorate E - Safety of the Food Chain
E3 - Chemicals, contaminants, pesticides

Brussels,
SANCO/E3/VW/np

Letter to stakeholders:
Trade problems due to phosphonate residues in certain food products

In early 2014, the European Commission received information from Member States and food business operators showing the presence of phosphonates in or on certain products leading to higher residues than the maximum residue level (MRL) of 2 mg/kg laid down in Regulation (EC) No 396/2005[1] for those products, corresponding to the limit of determination. The MRLs for fosetyl apply to phosphonate residues because phosphorous acid and its salts are included in the residue definition for enforcement of fosetyl.

The Commission collected monitoring data to investigate the presence of phosphonates in food. Those data were generated by food business operators and showed that phosphonates are present at levels that vary depending on the source and product, but frequently exceed the MRLs set at the limit of determination. Further data analysis indicated that the vast majority of non-compliant samples contain residues of phosphorous acid and its salts in excess of the limit of determination while residues of fosetyl and its salts remain below the limit of determination.

To avoid significant market disruptions in the trade of concerned products that have already been treated with phosphonate-containing products and as there is no risk for consumers identified from the current scientific data, it is appropriate to set temporary MRLs for fosetyl, based on the available monitoring data and on a statement of EFSA[2]. Those temporary MRLs should apply only until measures to prevent the occurrence of phosphonate residues in relevant crops in future growing seasons take effect. To this end, the Standing Committee on the Food Chain and Animal Health delivered a favourable opinion on a relevant Commission proposal (SANCO/10843/2014) on 13 June 2014. Subject to scrutiny by the Council of the European Union and the European Parliament as well as formal adoption by the Commission, the proposal is expected to be published in the Official Journal of the European Union in the second half of 2014 and enter into force

[1] OJ L 70, 16.3.2005.

[2] EFSA Journal 2014;12(5):3695.

on the day following that of its publication. Application of the temporary MRLs will be limited until 31 December 2015.

It is the responsibility of food business operators to find solutions to ensure compliance with the MRLs at 2 mg/kg, which will be applicable again from 1 January 2016, in future growing seasons. Discussions are currently ongoing to clarify the most appropriate approach to regulate phosphonate-containing products, as phosphonates are approved as active substances in plant protection products in the EU, but also used in fertiliser products and as biostimulants. However, regardless of the legal status of products containing phosphonates, phosphonate residues fall within the scope of Regulation (EC) No 396/2005 and food placed on the market has to comply with the MRLs set in its Annexes. Stakeholder organisations have an important role to play in ensuring communication to different economic entities along the food chain, to prevent the occurrence of similar issues in the next growing seasons.

According to information from stakeholders, the phosphonate residues in question are a consequence of the intentional use of fertiliser products containing phosphonates. These residues are hence not unavoidable. Notwithstanding the outcome of the discussions on the regulation of phosphonate-containing products and the possibility to generate data that supports the setting of permanent MRLs in accordance with Articles 6 ff. of Regulation (EC) No 396/2005, producers of the concerned food products should consider discontinuing the use of such products and investigate the use of alternative fertilisers that do not lead to non-compliances with the EU MRLs.

In light of the experience gained from this incidence, it is important that all economic entities involved in the production and trade of the concerned food products as well as of phosphonate-containing products marketed as plant protection products, fertilisers or biostimulants are well aware of the applicable legislation and future developments. It is my expectation that such awareness will prevent the occurrence of non-compliances with the applicable MRLs in future growing seasons. I would greatly appreciate if you could distribute the above information to your member organisations, trading partners and other relevant stakeholders. My services remain at your disposal for further information. On this matter, you can contact Mr Volker Wachter (tel.: +32-2-29-58305) from the SANCO Pesticide Residues sector.

Yours sincerely,

Michael Flüh
Head of Unit

Cc: J. Bernsel, V. Delvaux, E. Liégeois (ENTR.F.2)
A. Bitterhof, W. Reinert, V. Wachtler (SANCO.E.3)
A. Dionisi (SANCO.G.7)
H. Joostens (TRADE.D.3)