Jalhuca Explotaciones, S.L.

Participation at International Webinar

Residue testing in organic production: Investigations after detection of Phosphonic acid and its salts

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WHO IS JALHUCA?

Jalhuca started in 2002 producing and trading organic Avocados and Mangoes in south of Spain

Since 2002 certified with CAAE

Since 2017 operating in Peru also with CAAE

- In Spain About 140 has of own Production (mainly Avocados)

- In Peru collaborating with Growers producing organic Avocados, Mangoes, Ginger and Turmeric

STATISTICS

How many cases?
6 official Cases Detected (All < 1,0 mg/kg)

How many lots had to be downgraded?
Finally all were sold as organic

How many have resulted in improving precautionary measures?
None

How many have resulted in the detection of any non-compliance?
None

PHOSPHONIC ACID (PA) is always detected with FOSETIL-AL

It Leads to SUSPECT

Even if the origin is not clear

Phosphonic acid is not a Pesticide and it´s not toxic, but crop with positive results were treated as contaminated due to the ignorance of producers and operators.

BNN started in 2013 giving non very clear information and this lead to different ways to treat with it (Also today they only give recommendations, but they haven´t investigate all possible origins)

Their recommendation is to investigate the used products but at the same time let the food marketable as organic…

Official Instruction:

Block the lot and investigate

Consequences:

Often the results came a few weeks later when the lot is even sold

Bureaucracy increases
Above all between different European operators and certifiers

Can lead to economic losses for the grower and the trader

Analysis costs will increase a lot if PA detection will be indicated as obligated

Distortion of the market
Some Exporters from Mexico offer Organic Mangoes and Avocadoes, but they don´t give any guarantee that the fruit is PA-FREE

First Years only German clients focused on this item (due to BNN factsheets)

Most of them accept low level presence of PA

Low level detection of PA is solved in an internal way between
Providers and clients

Even some certifiers recommend not to analyse specially looking for PA

RESULTS OF INVESTIGATIONS

A – Caused by using authorised or not authorised fertilizers

In that cases the results of the analysis are high levels
(In conventional Avocados we have seen levels up to 8-10 mg/kg of PA and even more)

You can’t obligate the farmers to analyse the certified products they buy.

The confidence chain will break (Growers doubt why they are paying high prices for certified fertilizers and after all they have to make analysis… - this makes no sense for them)

B - Caused by natural processing of the plant (Low concentrations of PA)

Our internal research and experiences of other growers, have shown that stressed plants can generate Phosphonic acid;

Hydric stress, strong temperatures (heat and cold), unstable soil conditions… (extreme examples: Almonds, Ginger; Presence of PA without receiving any fertilizer)

In Big farms you can also have different results on different areas and on different dates

(Mixed crops – different results : example mangoes 0,0 mg/kg – kumquat 2,7 mg/kg)

TEST WITH AVOCADOS

Sample was 40 kg avocados from 2 trees standing next to each other

30/01/2020 INITIAL VALUE PA: 0.42 mg/kg

	Ripening Chamber 24°C	Fridge 4 °C
03/02/2020	0,61	0,32
06/02/2020	0,70	0,42
10/02/2020	0,57	0,30
13/02/2020	0,48	0,24
20/02/2020	1	0,38

SOLUTIONS

Operators need clear instructions when to start an investigation

Not every positive result leads to a “Non-Compliance”
Authorities have to accept and clarify the unknown origin of low level presence of PA

We need a reasonable indication of a limit (e.g. 1,0 -2,0 mg/kg)
(In USDA/NOP limit is 5% of LMR)

Investigations should be carried out quickly.
Problem is to coordinate different certifiers…
Producer – Seller – Buyer