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TECHNICAL BROCHURE

EU AND CODEX ALIMENTARIUS MAXIMUM RESIDUE LIMITS CHANGES

REVIEW OF THE PERIOD: 2018-2019

COLEACP

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This publication is an integral part of a COLEACP collection, which is made up of educational and technical tools and materials. All of them are suited to different types of learners and beneficiaries and levels of education found in agricultural supply chains, production and sales.

This collection is available online for COLEACP members and beneficiaries.

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1. INTRODUCTION

A Maximum Residue Limit (MRL) is the maximum concentration of a plant protection product (PPP) legally permitted in food in a given country. By following recommended good agricultural practice (GAP), growers ensure that produce does not contain pesticides at levels above the MRLs. This, in turn, ensures that food placed on the market is safe and does not pose a risk to consumers.

Ongoing regulatory review, and the implementation of stricter standards, has led to many changes to both PPP authorisations and MRLs in the European Union (EU) and at the international level. This has a direct impact on producers who often must change production practices (GAP) to comply with the new rules. Any non-compliances can lead to the interception and destruction of goods, and thus cause significant financial loss as well as reputational damage.

A lower MRL might mean that the GAP needs to be changed or, in the worst case, that a plant protection product (PPP) can no longer be used on certain crops. It is essential for producers to keep up-to-date and to make any necessary adjustments in time to ensure compliance with the regulations, either by adopting the new GAP, or by using alternative control methods. The GAP generally includes recommended dose rate, number and frequency of applications, and the pre-harvest interval.

It should be noted that some producers supply diverse markets that may have different MRLs for a given crop. Domestic and regional markets in ACP countries generally apply MRLs set by the Codex Alimentarius, and these sometimes differ from the EU MRLs. Codex MRLs are also subject to review.

Keeping track of PPP authorisations and MRL changes is complex and time-consuming, but essential to ensure regulatory compliance. COLEACP has responded to requests from its membership to provide a PPP information service that keeps you up to date with the changes that are most critical for the ACP fruit and vegetable sector. This includes a database (E-GAP) that lists the EU and CODEX MRLs currently in force, alongside the respective recommended GAPs. E-GAP is accessible via the COLEACP website. It is supplemented by periodic "Flash Info" bulletins to highlight critical regulatory changes and recommendations as soon as they are officially published.

This document briefly outlines the contents of the database and how it can be accessed. It also summarises the most significant EU and Codex MRLs changes made during 2018-2019, focusing on active substances that are of importance for horticulture in Africa, Caribbean and Pacific (ACP) countries. Producers who use these active substances are urged to take note of these changes and ensure they take the necessary measures to comply with the new MRLs in force.

2. E-BPA, THE COLEACP DATABASE ON GOOD AGRICULTURAL PRACTICES

The COLEACP online database (E-GAP) was released in 2018 and is accessible to all its members and beneficiaries. To date, it is one of the few sources of this information specifically dedicated to the horticultural sector in ACP countries. The GAP data is obtained from a combination of sources including COLEACP PPP field trials, data from the manufacturers, and scientific literature.

E-GAP includes the MRLs set by the EU and Codex Alimentarius for key horticultural crops in ACP countries. It also provides the Good Agricultural Practices (dose rate, interval between treatments, pre-harvest intervals) that ensure compliance with these MRLs. Additional information such as the type of pesticide, the registration status of the active substance in the EU and in ACP countries, the classification recommended by the World Health Organisation (WHO) and the resistance group (FRAC code for fungicides; IRAC classification for insecticides) is also provided[1].

The COLEACP database, E-GAP, is accessible with your login and password in the e-service section of our website: here.

3. GENERAL STATISTICS FOR THE PERIOD 2018-2019

3.1. Number of active substances affected by MRL changes

The graphs below show the total number of active substances for which MRLs have been modified in 2018 and 2019.

Over the period 2018-2019, 173 active substances have been subject to MRL changes within the EU. At the level of Codex Alimentarius, 67 active substances have been subject to MRL changes during this period.

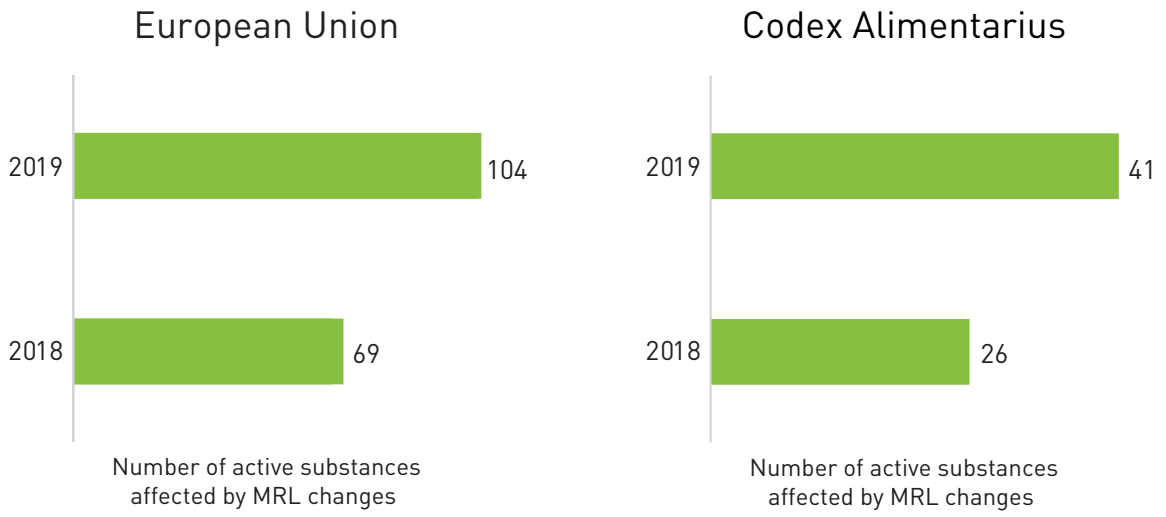

Figure 1 Number of active substances affected by MRL changes

1 COLEACP highlights the importance of following the instructions provided on the PPP product label. In addition, before applying any product, it is advisable to consult the latest regulatory changes in the EU Pesticide and Codex Alimentarius databases.

3.2. Summary statistics 2018-2019 for key horticultural crops in ACP countries

The graphs below show statistics on MRL changes for active substances and crops that are identified by COLEACP as key for the horticultural sector in ACP countries.

Key active substances are those used/registered in one or more ACP country on horticultural crops that are frequently exported regionally or internationally.

At the EU level, there was a change of 120 MRLs for key crops in the horticultural sector. Of these changes, 66 are MRL reductions.

For the Codex Alimentarius, there were a total of 38 modifications, of which 16 were MRL reductions.

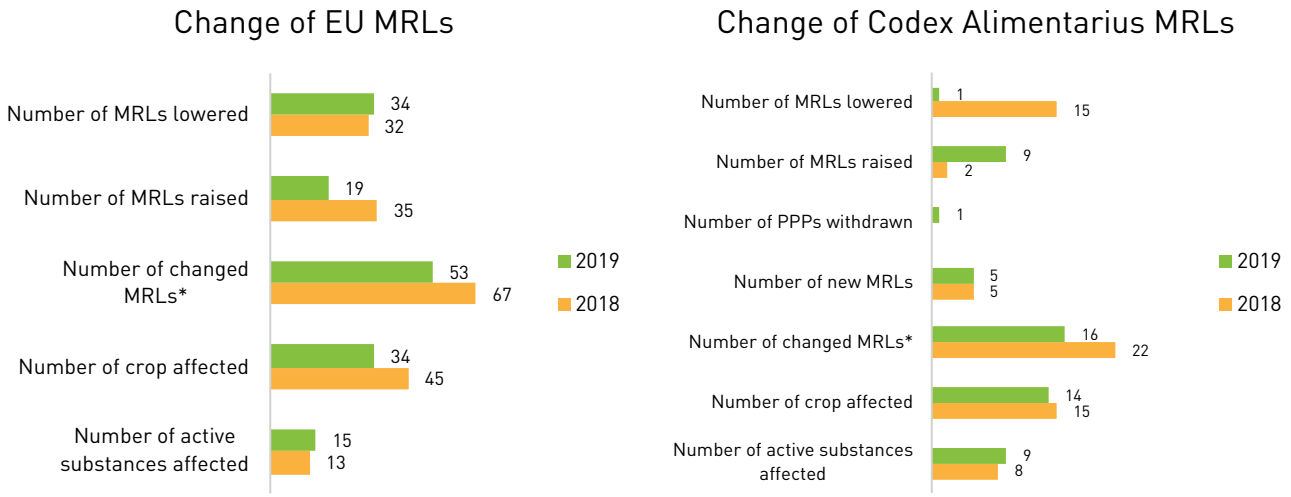

Figure 2 Statistics 2018-2019 for key horticultural crops in ACP countries
(*Number of changed MRLs only for key active substances for horticultural crops in ACP countries)

4. MRL CHANGES FOR KEY CROPS IN ACP COUNTRIES

The following tables present MRLs changes for key active substances for horticultural crops in ACP countries in 2018 and 2019. They are compiled from the regulatory monitoring conducted by COLEACP over this period.

4.1. MRL changes in the EU in 2018-2019

The full list of changes can be seen in the amendments of the European Regulations published in 2018 and 2019 (Regulation (EC) No 396/2005).

Higher MRL Lower MRL

4.1.1. EU MRL changes in 2018 for key crops in ACP countries

ACTIVE SUBSTANCE	CROP	FORMER MRL	NEW MRL
Abamectin	Citrus	0.015	0.04
Abamectin	Banana	0.02	0.02
Emamectin benzoate	Leafy brassica	0.01	0.03
Emamectin benzoate	Beans (with pods)	0.01	0.03
Emamectin benzoate	Peas (with pods)	0.01	0.03
Triflumizole	Chili pepper	0.1	0.02
Triflumizole	Eggplant	0.2	1.5
Triflumizole	Cucurbits with edible peel	0.2	0.5
Triflumizole	Cucurbits with non-edible peel	0.1	0.02
Lambda-cyhalothrin	Potato	0.02	0.01
Lambda-cyhalothrin	Cassava	0.02	0.01
Lambda-cyhalothrin	Yam	0.02	0.01
Lambda-cyhalothrin	Tomato	0.1	0.07
Lambda-cyhalothrin	Eggplant	0.5	0.3
Lambda-cyhalothrin	Cucumber	0.1	0.05
Lambda-cyhalothrin	Courgette - Bitter melon	0.1	0.15
Lambda-cyhalothrin	Melon	0.05	0.06

ACTIVE SUBSTANCE	CROP	FORMER MRL	NEW MRL
Lambda-cyhalothrin	Watermelon	0.05	0.06
Lambda-cyhalothrin	Head cabbages	0.2	0.15
Lambda-cyhalothrin	Kales	1	0.01
Lambda-cyhalothrin	Baby spinach	0.5	0.7
Lambda-cyhalothrin	Baby pak-choï	1	0.7
Lambda-cyhalothrin	Beans (with pods)	0.2	0.4
Lambda-cyhalothrin	Squash	0.05	0.06
Fenamidone	Potato	0.01	0.02
Fenamidone	Chili pepper	1	4
Fenamidone	Cucumber	0.01	0.2
Fenamidone	Squash	0.01	0.2
Fenamidone	Watermelon	0.01	0.2
Pyrimethanil	Cucumber	0.7	0.8
Deltamethrin	Kales	0.01	0.15
Trifloxystrobin	Beans (without pods)	0.01	0.09
Trifloxystrobin	Peas (without pods)	0.01	0.09
Trifloxystrobin	Peas (with pods)	0.01	1.5
Cymoxanil	Beans (with pods)	0.01	0.05
Difenoconazole	Other flowering brassica	0.05	0.08
Difenoconazole	Spinaches and similar leaves (amaranth, cassava, sweet potato, ...)	2	3
Chlorpyrifos-ethyl	Citrus	0.3	1.5
Chlorpyrifos-ethyl	Lemons	0.2	1.5
Chlorpyrifos-ethyl	Coconut	0.05	0.01
Chlorpyrifos-ethyl	Avocado	0.05	0.01
Chlorpyrifos-ethyl	Banana	3	4
Chlorpyrifos-ethyl	Mango	0.05	0.01
Chlorpyrifos-ethyl	Papaya	0.05	0.01
Chlorpyrifos-ethyl	Sweet potato	0.05	0.01

ACTIVE SUBSTANCE	CROP	FORMER MRL	NEW MRL
Chlorpyrifos-ethyl	Tomato	0.01	0.1
Chlorpyrifos-ethyl	Eggplant	0.4	0.01
Chlorpyrifos-ethyl	Okra	0.5	0.01
Chlorpyrifos-ethyl	Baby & sweet corn	0.05	0.01
Chlorpyrifos-ethyl	Broccoli	0.05	0.01
Chlorpyrifos-ethyl	Kales	0.05	0.01
Chlorpyrifos-ethyl	Sweet potato leaves	0.05	0.01
Chlorpyrifos-methyl	Pineapple	0.05	0.01
Chlorpyrifos-methyl	Garlic, onion, shallot	0.05	0.01
Chlorpyrifos-methyl	Tomato	0.01	1
Chlorpyrifos-methyl	Eggplant	0.5	1
Chlorpyrifos-methyl	Peppers	0.5	1
Chlorpyrifos-methyl	Cucurbits with edible peel	0.05	0.01
Chlorpyrifos-methyl	Brassica vegetables	0.05	0.01
Chlorpyrifos-methyl	Baby leafs	0.05	0.01
Chlorpyrifos-methyl	Beans (with pods)	0.05	0.01
Chlorpyrifos-methyl	Peas (with pods)	0.05	0.01
Lufenuron	Kales	0.2	0.01
Lufenuron	Head cabbages	0.5	0.01
Lufenuron	Beans (with pods)	0.02	0.01
Difenoconazole	Baby leafs	0.05	4
Difenoconazole	Leek	0.5	0.6

4.1.2. MRL changes coming into force in 2020 for key crops in ACP countries

ACTIVE SUBSTANCE	CROP	FORMER MRL	NEW MRL
Acetamiprid	Spinaches and similar leaves (amaranth, cassava, sweet potato, ...)	5	0.6
Buprofezin	Banana	0.5	0.01
Buprofezin	Passion fruit	0.05	0.01
Iprodione	Green bean	2	0.01
Iprodione	Peppers	7	0.01
Fosetyl-aluminium	Coconut	2	500
Fosetyl-aluminium	Cucumber	75	80
Fosetyl-aluminium	Courgette - Bitter melon	75	100
Fluopyram	Mango	0.02	1
Fluopyram	Peppers	2	3
Difenoconazole	Peppers	0.8	0.9
Difenoconazole	Okra	0.05	0.6
Lambda-cyhalothrin	Cucumber	0.1	0.05
Lambda-cyhalothrin	Courgette	0.1	0.15
Pyraclostrobin	Other Citrus	1	2
Pyraclostrobin	Lemons	1	2
Pyraclostrobin	Limes	1	2
Pyraclostrobin	Mandarins	1	2
Pyraclostrobin	Grapefruit	1	2
Spirotetramat	Garlic	0.1	0.4
Trifloxystrobin	Broccoli	0.5	0.6
Pyridaben	Tomato	0.3	0.15

4.1.2. MRL changes coming into force in 2020 for key crops in ACP countries

4.1.2.1. Tebufenozide (MRLs in force since 04.01.20)

The MRL changes for tebufenozide came into force on 4 January 2020. The table below lists the MRL changes that have been identified by COLEACP as the most critical for ACP countries. The full list of changes for this active substance can be found in the new EU Regulation (EU 21019/973).

CROP	FORMER MRL	NEW MRL
Cauliflowers	0.5	0.01
Chinese cabbages/pe-tsai	0.5	10
Garlic	0.05	0.01
Kales	0.5	10
Onion	0.05	0.01
Other flowering brassica	0.5	0.01
Other head brassica	0.5	0.01
Other leafy brassica	0.5	0.01
Bell peppers	1	1.5
Runner beans (with pods)	0.05	0.01
Runner beans (without pods)	0.05	0.01
Shallots	0.05	0.01
Sugar snap peas	0.05	0.01
Tomato	1	1.5
Watermelon	0.05	0.01

4.1.2.2. Mandipropamide (MRLs in force since 31.01.20)

The MRL changes for mandipropamide came into effect on 31 January 2020. The table below lists the MRL changes that were identified by COLEACP as the most critical for ACP countries. The full list of changes for this active substance can be found in the new EU Regulation (EU 2019/10153).

CROP	FORMER MRL	NEW MRL
Other Cucurbits with edible peel	0.1	0.01

4.1.2.3. Imazalil (MRLs in force from 16.04.20)

The MRL changes for imazalil will come into force on 16 April 2020. The table below lists the MRL changes that have been identified by COLEACP as the most critical for ACP countries. The full list of changes for this active substance can be found in the new EU Regulation (EU 2019/1582).

CROP	FORMER MRL	NEW MRL
Banana	2	0.01
Grapefruit	5	4
Mango	0.05	0.01
Oranges	5	4
Other Citrus	5	0.01
Papaya	0.05	0.01
Pineapple	0.05	0.01
Potato	3	0.01
Squash	0.05	0.01
Watermelon	0.05	0.01

4.1.2.4. Fipronil (MRLs in force from 18.05.20)

The MRL changes for fipronil will come into force on 18 May 2020. The table below lists the MRL changes that have been identified by COLEACP as the most critical for ACP countries. The full list of changes for this active substance can be found in the new EU Regulation (EU 2019/1792).

CROP	FORMER MRL	NEW MRL
Broccoli	0.01	0.005
Cauliflowers	0.01	0.005
Onion	0.02	0.005
Other flowering brassica	0.01	0.005
Shallots	0.02	0.005

4.2. MRL changes in the Codex Alimentarius in 2018-2019

The following tables show MRL changes in the Codex Alimentarius for key active substances for the protection of horticultural crops in ACP countries in 2018 and 2019.

The full list of MRL changes can be seen in the reports of the Codex Alimentarius Committee on Pesticide Residues (CCPR) from 2018 and 2019.

Higher MRL | Lower MRL | New MRL | Withdrawal

4.2.1. Changes to Codex Alimentarius MRLs 2018

ACTIVE SUBSTANCE	CROP	FORMER MRL	NEW MRL
Oxamyl	Aubergine	/	0.01
Spinetoram	Other Cucurbits with edible peel	/	0.04
Cyprodinil	Carrot	0.7	1.5
Oxamyl	Carrot	0.1	0.01
Trifloxystrobin	Soy cabbage	0.5	1.5
Fosetyl-aluminium	Cucumber	/	60
Oxamyl	Cucumber	2	0.02
Spinetoram	Cucumber	/	0.04
Fosetyl-aluminium	Courgette	/	70
Oxamyl	Courgette	/	0.04
Spinetoram	Courgette	/	0.04
Tebuconazole	Green bean	/	3
Fosetyl-aluminium	Lettuce	/	40
Fluopyrame	Mango	/	1
Difenoconazole	Mini corn / sweet corn	/	0.01
Fosetyl-aluminium	Oranges	/	20
Difenoconazole	Watermelon	/	0.02
Oxamyl	Watermelon	/	0.01
Spinetoram	Potato	/	0.01
Fosetyl-aluminium	Tomato	/	8
Oxamyl	Cherry tomato	2	0.01
Fluopyrame	Cherry tomato	0.4	0.4

4.2.2. Changes to Codex Alimentarius MRLs 2019

ACTIVE SUBSTANCE	CROP	FORMER MRL	NEW MRL
Abamectin	Mini corn / sweet corn	/	0,002
Imazalil	Banana	2	3
Fludioxonil	Carrot	0,7	1
Fluopyrame	Cherry tomato	0,4	0,5
Imazalil	Lemons	5	15
Imazalil	Limelettes	5	15
Kresoxim-methyl	Melon	/	0,5
Imazalil	Melon	2	Withdrawal
Imazalil	Oranges	5	8
Pyriproxifen	Papaya	/	0,3
Oxamyl	Pepper	2	0,01
Propiconazole	Pineapple	0,02	2
Mandipropamide	Potato	0,01	0,1
Imazalil	Potato	5	9
Kresoxim-methyl	Pumpkins	/	0,5
Kresoxim-methyl	Watermelon	/	0,5

5. REFERENCES

- EU legislation on MRLs - Regulation EC 396/2005 and amendments 2018 et 2019
- Regulation (EC) No 396/2005 of the European Parliament and of the Council of 23 February 2005 on maximum residue levels of pesticides in or on food and feed of plant and animal origin and amending Council Directive 91/414/EEC
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