codex alimentarius commission

FOOD AND AGRICULTURE ORGANIZATION OF THE UNITED NATIONS

WORLD HEALTH ORGANIZATION

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Agenda Item 9 **CX/LAC 06/15/9**
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JOINT FAO/WHO FOOD STANDARDS PROGRAMME

FAO/WHO COORDINATING COMMITTEE FOR LATIN AMERICA AND THE CARIBBEAN

15th Session
Mar del Plata, Argentina, 13-17 November 2006

ISSUES OF SIGNIFICANCE TO THE REGION

DISCUSSION PAPER

NON-COMPLIANCE WITH CODEX MRLS AND IDENTIFICATION OF COMPOUNDS FOR WHICH CODEX MRLS ARE NEEDED

(Prepared by Brazil)

BACKGROUND

1. The 14th Session of the FAO/WHO Coordinating Committee for Latin America and the Caribbean, when considering Objective 7 - Identification and Priorization of Regional Standard-related needs of the CCLAC Strategic Plan, noted the concern of a number of delegations about deviations from Codex MRLs (e.g. pesticide residues) by some Codex and WTO Members that, without scientific justification, set MRLs at lower limits than those established by the Codex Alimentarius Commission. The absence of Codex MRLs, for example for agrochemicals used in major export commodities of countries of the Region, also gave rise to the unilateral setting of MRLs that did not adhere to the science-based principles established in the WTO SPS Agreement or Codex. These delegations indicated that the setting of MRLs to coincide with the detection limit of the analytical method placed an extra burden on export from developing countries to international markets and created trade restrictions that were not justified as these were based on economic considerations and not scientific grounds.

2. Other delegations referred to the need to identify financial and technical support to produce data on dietary intake, exposure, etc. so that joint FAO/WHO[1] committees advising Codex committees could evaluate compounds, such as additives and pesticides, to establish Codex MLs or MRLs and thus prevent the unilateral setting of restrictive values that had no internationally recognized scientific justification. The Committee agreed that capacity building activities should be developed by FAO in order to facilitate the establishment of MRLs for pesticides in products of interest to the Region.

3. The Committee expressed its strong concern about the lack of Codex MRLs for substances (e.g. pesticides, veterinary drugs, etc.) of interest to the Region and over the tendency for certain WTO/Codex Members to unilaterally establish MRLs at the detection limit of the analytical method, without sufficient scientific evidence to justify limits that were more restrictive than those of Codex, when these existed[2].

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1 Joint FAO/WHO Meeting on Pesticide Residues (JMPR); Joint FAO/WHO Expert Committee on Food Additives (JECFA).

2 ALINORM 05/28/36, paras. 32 & 90-93.

4. In addition, the Committee agreed to set up a working group, chaired by Brasil and made up of Argentina, Bolivia, Chile, Colombia, Costa Rica, Cuba, Peru, Uruguay, ALA, ICGMA and INPPAZ but nevertheless open to all countries of the Region, that would seek to:

(a) identify and monitor countries not complying with MRLs in Codex standards and;

(b) identify compounds for which Codex MRLs were needed and thus generate data for their evaluation by FAO/WHO scientific bodies such as JECFA and JMPR.

The delegation of Jamaica volunteered to provide data on pesticides used on tuber crops in the Caribbean.

INTRODUCTION

5. In a number of sessions of Codex Committees which have the mandate to establish Maximum Residue Limits (MRLs) and Maximum Levels (MLs) such as the Committees on Pesticide Residues (CCPR), Veterinary Drugs in Foods (CCRVDF), Contaminants in Foods (CCCF) and Food Additives (CCFA) among other functions, concerns have been raised on the legal importing MRLs requirements of some countries, which are, in many cases, stricter than Codex MRLs. In this context, many are the issues which affect countries exports, particularly those of the developing countries:

(a) products which were in conformity with the importing country MRL but were re-exported to another country whose MRL was different;

(b) strict legal requirement of a national MRL lower than that from Codex, and;

(c) MRLs established at the detection limit of the analytical method, at about 0,01 mg/kg.

6. Another problem relates to the high number of compounds, such as pesticides and veterinary drugs, which have been registered in some countries but have not yet been evaluated by JMPR and/or by JECFA, and, therefore, do not have Codex MRLs established.

ACTIONS TAKEN

7. According to the mandate of the Working Group the suggestion is that CCLAC Members make a selection of the cultures of interest to the Region and that are internationally traded, as well as of compounds commonly used in these cultures by each country. In the present paper, apple was used as an example, but the idea is that the CCLAC Members decide on which cultures and compounds should be included in the work to be undertaken, recalling that this is an introductory paper.

8. After the selection of the cultures and of the compounds used in them, the suggestion is to make a research of Codex Members MRLs of these compounds applied to these cultures. As an exercise, the Codex Members selected for the analysis of apple were: Argentina, Australia, Brazil, Canada, Chile, China, Colombia, European Community, India, Indonesia, Israel, Japan, Panama, Singapore, South Africa, United States. As for the selection of products, the selection of Codex Members is open for discussion and inclusions by CCLAC Members. Reference databases were taken from: Foreign Agricultural Service (FAS On line), Ministry of Agriculture and Rural Development of Israel, National Health Surveillance Agency - ANVISA. Research of Codex MRLs at *Codex Alimentarius* – Pesticide Residues in Food database, which contains pesticides MRLs adopted by the Commission Codex Alimentarius as for its last update at 02 of March of 2006.

9. The next step taken was the elaboration of tables to list Codex Members MRLs and Codex MRLs in order to enable their comparison. The table is divided into columns which categorize the total number of MRLs established for that culture in each of the Codex Members selected; the number and the percentage of those also established by Codex; the number and the percentage of those which are not established by Codex; the number and the percentage of those which are more restrictive than its Codex MRLs. The comparison has the objective of identifying the relative amount of MRLs established by countries and not established by Codex and the relative amount of Codex Members MRLs which are different from Codex MRLs.

RESULTS OF THE COMPARISON OF CODEX AND COUNTRIES MRLs FOR APPLES

10. The data on MRLs applied to apple was organized in Table 1 bellow.

11. Some conclusions were drawn of its analysis, which can be summed up as follows:

(a) there are 21 Codex MRLs for apple[3], while the average in the countries researched is 35;

(b) about 67% of Members MLRs exist for compounds which do not have their MRLs established by Codex;

(c) accordingly, an average of only 33% of Members MRLs are established for compounds which also have their MRLs established by Codex;

(d) 30% of those countries MRLs are more restrictive than Codex MRLs.

Table 1 – Comparative of numbers of MRLs (Countries x Codex) for apples

Member	Total of MRLs established	MRLs also established by Codex	%	MRLs not established by Codex	%	MRLs lower than Codex	%
Argentina	38	9	23,68	29	76,32	8	88,89
Australia	8	4	50,00	4	50,00	3	75,00
Brazil	33	7	21,21	26	78,79	3	42,86
Canada	32	7	21,88	25	78,13	3	42,86
Chile	12	7	58,33	5	41,67	1	14,29
China	4	2	50,00	2	50,00	1	50,00
Colombia	14	14	100,00	0	0,00	0	0,00
EU	41	9	21,95	32	78,05	7	77,78
India	3	0	0,00	3	100,00	-	-
Indonesia	16	7	43,75	9	56,25	1	14,29
Israel	92	16	17,39	76	82,61	6	37,50
Japan	77	14	18,18	63	81,82	1	7,14
Singapore	26	6	23,08	20	76,92	2	33,33
South Africa	44	10	22,73	34	77,27	8	80,00
United States	81	14	17,28	67	82,72	1	7,14
Average rate	35	8,40	32,63	26	67,37	3	29,90

CONCLUSIONS AND RECOMMENDATIONS

12. There are a variety of issues that affect countries imports and exports. The strict compliance of countries MRLs more restrictive than those of Codex has been appointed by many developing countries as one of them. However, CCPR, CCRVDF, CCCF and CCFA, have a mandate to establish MRLs and MLs and to elaborate reference documents for Members and are not competent to address commercial issues, for which the appropriate international organization is the WTO. As the Codex standards are considered as international references in food safety matters by that organization (see SPS Agreement, Annex A, paragraph 3.a) it is of high importance for developing countries that Codex Committees give priority to the establishment of MRLs/MLs for products of their interest. This particular issue of the special need of developing countries should be adjusted in those Codex Committees mandates as well as in that of the Codex Alimentarius Commission.

[3] Codex MRLs for apple: Chlorpyrifos, Cyfluthrin, Cyhexatin, Cyprodinil, Deltamethrin, Dichlofluanid, Diflubenzuron, Dinocap, Diphenylamine, Dithiocarbamates, Ethephon, Fenamiphos, Hexythiazox, Imidacloprid, Malathion, Methidathion, Oxamyl, Parathion Methyl, Phosmet, Propargite, Spinozad, Triforine.

13. The study case undertaken to analyze the issue of non-compliance with Codex MRLs (the objective "a" established at ALINORM 05/28/36, para. 92) showed the absence of Codex MRLs for many compounds used in a culture of interest to CCLAC countries. A conclusion that can be drawn of this analysis is that Codex does not give priority to the needs of developing countries. This conclusion highlights the importance of objective "b" established in CCLAC 14th Session. As a suggestion to work together towards the attainment of this objective, the CCLAC Members should evaluate the proposal of gathering information according to the table presented in annex. In this table, the Members would present the cultures and compounds of interest for which there are no Codex MRLs established.

14. The identification of compounds and cultures for which Codex MRLs are needed should be guided by their significance to CCLAC countries, taking into account their impact on human health and on international trade, as for the record of exports rejected. This identification will depend on countries conducting a more detailed research on their interests with a view to the importance of generating data necessary for FAO and WHO expert bodies evaluations. As Members of the Committee have continually manifested their difficulties in generating data to be submitted to JMPR evaluation, ways of cooperation regarding resources and technical assistance should be sought by CCLAC.

15. Special attention should be given by the CCLAC on the proposal made by the Chairperson of the CCPR at its 38th Session to prepare a discussion paper on how Codex MRLs are used at the national level (ALINORM 06/29/24, paragraphs 222-230), which will be circulated and submitted for the CCPR consideration at its next session, in April 2007.

16. The Committee invites member countries to present the cultures and compounds of interest for which there are no Codex MRLs established according the table in annex, preferably in excel. The member countries are also invited to inform, using an "X", if the national MRL was established based on national data or, when appropriate, based on reference country MRLs.

Table 1 - Maximum Residue Level MRL (mg/kg) - in XXXXXX (crop)

		Crop:						
Registered active ingredient	**National MRL**	**National data**	**USA**	**EU**	**Japan**	**Australia**	**Canada**	**Others**

ANNEX

Table 1 - Maximum Residue Level - MRL in Apple (mg/kg)

Pesticide	Argentina	Australia	Brazil	Canada	Chile	China	Colombia	EC	India	Indonesia	Israel	Japan	Singapore	South Africa	US	CODEX
Abamectin	**0,01**	**0,01**	**0,01**	0,02			0,02	**0,01**			0,02	0,02		**0,01**	0,02	**0,02**
Acequinocyl												1,0			0,4	
Acetamiprid	0,02										0,05	5,0			1,0	
Ametryne											0,01					
Aminotriazole											0,05					
Amitraz											0,5					
Aviglycine		0,1	0,05									0,09			0,08	
Azinphos-Methyl				2,0			2,0	**0,5**			2,0	2,0	**1,0**	**0,4**	**1,5**	**2,0**
Azocyclotin											1,0					
Benfuracarb											0,01					
Benomyl	1,0			5,0				0,2		5,0		3,0		3,0	7,0	
Bifenazate	1,0											2,0			0,75	
Bitertanol											2,0					
Bromuconazole											0,05					
Boscalid												3,0			3,0	
Bupirimate											0,03					
Buprofezin											0,1	0,05			4,0	
Cadusafos											0,05					
Captan	15,0		25,0	**5,0**	25,0		25,0	**0,01**		25,0	**10,0**	**5,0**	25,0	**15,0**	25,0	**25,0**
Carbaryl	**2,0**		**2,0**	5,0	5,0		5,0	**0,05**		**1,0**		**1,0**	5,0	**2,5**	10,0	**5,0**

ANNEX

Pesticide	Argentina	Australia	Brazil	Canada	Chile	China	Colombia	EC	India	Indonesia	Israel	Japan	Singapore	South Africa	US	CODEX
Carbendazim											3,0					
Carbosulfan											0,1					
Carfentrazone Ethyl											0,01	0,1			0,1	
Chlorpyrifos	**0,2**		1,0	**0,01**	1,0		0,5	0,5		1,0	1,0	1,0	1,0		1,5	**0,5**
Clofentezine	0,5		0,1					0,5			0,5	1,0		0,5	0,5	
Clothianidin												1,0			1,0	
Cyfluthrin	0,5				0,5	0,5	0,5	**0,2**				1,0		**0,1**	0,5	**0,5**
Cyhexatin											2,0					**2,0**
Cypermethrin											2,0					
Cyproconazole											0,05					
Cyprodinil			1,0				0,05					5,0		0,1	0,1	**0,05**
D-2,4								0,05			0,01	0,01			5,0	
Dalapon											0,1					
Deltamethrin	**0,1**		**0,02**				0,2	0,2			**0,05**	0,5		**0,1**	0,2	**0,2**
Diazinon	0,05		0,5	0,75				0,3			0,3	0,1	0,5	0,5	0,5	
Dichlobenil												0,2			0,5	
Dichlofluanid											5,0					**5,0**
Dichlorvos											0,1					
Dicofol	0,5		5,0	3,0				0,02			5,0	3,0	5,0	5,0	5,0	
Difenoconazole											0,1					
Diflubenzuron											**1,0**					**5,0**

ANNEX

Pesticide	Argentina	Australia	Brazil	Canada	Chile	China	Colombia	EC	India	Indonesia	Israel	Japan	Singapore	South Africa	US	CODEX
Diflufenican											0,01					
Dimethoate	0,5		2,0	2,0	1,0			0,02		1,0	1,0		2,0		2,0	
Diniconazole-M											0,05					
Dinocap											**0.05**					**0,2**
Dinotefuran											0,05					
Diphenylamine	**3,0**	10,0		**5,0**	**5,0**	**5,0**	10,0	**5,0**		**5,0**		10,0	**5,0**		10,0	**10,0**
Dithianon											3,0					
Dithiocarbamates											3,0					**2,0**
Diuron											0,5	0,05			1,0	
Dodine			5,0	5,0	5,0			1,0	5,0	5,0	5,0	5,0	5,0	1,0	5,0	
Emamectin															0,025	
Endosulfan	0,5			2,0				0,05			1,0	1,0		0,5	2,0	
Ethephon	**2,0**	**1,0**		**3,0**			5,0	**0,5**		5,0	5,0	5,0		**3,0**	5,0	**5,0**
Ethoxyquin											3,0					
Etofenprox											1,0					
Etoxazole		0,2									0,02	2,0		0,2	0,2	
Fenazaquin											0,1					
Fenamiphos							0,05	**0,02**				0,05			0,25	**0,05**
Fenarimol	0,01		0,05					0,3	5,0			1,0		0,2	0,1	
Fenbuconazole											0,1					
Fenbutation Oxide	0,5			3,0				2,0		5,0		5,0	5,0	2,0	15,0	

ANNEX

Pesticide	Argentina	Australia	Brazil	Canada	Chile	China	Colombia	EC	India	Indonesia	Israel	Japan	Singapore	South Africa	US	CODEX
Fenoxycarb											0,05					
Fenpropathrin			1,0									5,0			5,0	
Fenpyroximate	0,2		0,5			0,5					0,1	0,5		0,2	0,4	
Fenthion											2,0					
Fenvalerate	1,0							0,02				2,0		0,5	2,0	
Ferbam	2,0											5,0	3,0		7,0	
Flonicamid															0,2	
Fluazifop Butyl											0,1					
Fludioxonil												5,0			5,0	
Flufenoxuron											0,2					
Flumioxazin								0,05			0,01				0,02	
Fluroxypyr											0,01					
Flusilazole											0,2					
Folpet	10,0		10,0	25,0				0,01		10,0	10,0	5,0	10,0		25,0	
Fosetyl-Al	0,1															
Furathiocarb											0,1					
Glufosinate Ammonium	0,05										0,05	0,3			0,05	
Glyphosate	0,2		0,2					0,1				0,2			0,2	
Halfenprox											0,5					
Hexaconazole											0,1					
Hexythiazox	**0,05**						0,5				0,5	1,0		**0,2**	1,7	**0,5**

ANNEX

Pesticide	Argentina	Australia	Brazil	Canada	Chile	China	Colombia	EC	India	Indonesia	Israel	Japan	Singapore	South Africa	US	CODEX
Imidacloprid		**0,3**		0,5			0,5				**0,3**	0,5		**0,2**	0,5	**0,5**
Iminoctadine Tris											0,02					
Indoxacarb												1,0		1,0	1,0	
Iprodione											10,0					
Kresoxim Methyl	0,2		0,2	0,5				0,2			0,01	5,0		0,1	0,5	
Lambda Cyhalothrin	0,2							0,1				0,4		0,2	0,3	
Lufenuron											0,05					
Malathion	**0,5**		2,0	2,0	2,0		2,0	**0,5**		2,0	2,0	**0,5**	2,0	2,0	8,0	**2,0**
Mancozeb	2,0		2,0	7,0				0,5				5,0	3,0	3,0	7,0	
Maneb				7,0				3,0				5,0	3,0	3,0	2,0	
Metalaxyl								1,0				1,0			0,2	
Methidathion	**0,05**	**0,2**	**0,02**	0,5	0,5		0,5	**0,02**		0,5	0,5	0,5	**0,2**	**0,3**	**0,05**	**0,5**
Methiocarb											0,05					
Methomyl	0,02	1,0		0,5		2,0		0,2		2,0		3,0	5,0		1,0	
Methoxyfenozide	0,2			1,5							0,05	2,0			1,5	
Metiram			2,0	7,0				3,0				5,0	3,0	3,0	2,0	
Metominostrobin											0,2					
Monocrotophos											1,0					
Myclobutanil	0,5		0,1	0,5				0,5			0,5	5,0		0,2	0,5	
Napropamide												0,1			0,1	
Norflurazon												0,2			0,1	

ANNEX

Pesticide	Argentina	Australia	Brazil	Canada	Chile	China	Colombia	EC	India	Indonesia	Israel	Japan	Singapore	South Africa	US	CODEX
Novaluron											0,02	1,0		0,05	2,0	
Oryzalin												0,08		0,05	0,05	
Oxamyl					2,0		2,0	**0,01**		2,0		2,0	2,0		2,0	**2,0**
Oxolinic Acid											0,01					
Oxydemethon Methyl	0,7							0,02			1,0	0,5	0,5	0,4	1,0	
Oxyfluorfen												0,05			0,05	
Paraquat Dichloride			0,05					0,02				0,05			0,05	
Parathion Methyl											0,2					**0,2**
Penconazole											0,2					
Permethrin	0,1			1,0				0,05				2,0	2,0	0,5	0,05	
Phosalone				5,0	5,0			2,0		5,0		2,0	5,0	2,0	10,0	
Phosmet	**5,0**		**1,0**	10,0	10,0		10,0			10,0	**0,5**	10,0	10,0	**5,0**	10,0	**10,0**
Phosphamidon											0,5					
Piperonyl Butoxide				8,0								8,0	8,0	5,0	8,0	
Prohexadione Calcium								0,05				2,0			3,0	
Propargite											5,0					**3,0**
Propyzamide											0,05	0,06		0,1	0,1	
Pyraclostrobin			2,0									2,0			1,5	
Pyraflufen-Ethyl											0,01					
Pyrazophos											1,0					
Pyrethrins				1,0				1,0				1,0	1,0	1,0	1,0	

ANNEX

Pesticide	Argentina	Australia	Brazil	Canada	Chile	China	Colombia	EC	India	Indonesia	Israel	Japan	Singapore	South Africa	US	CODEX
Pyridaben			0,5	0,5								2,0			0,5	
Pyrifenox											0,05					
Pyrimethanil			1,0									5,0			3,0	
Pyrimidifen											0,1					
Pyriproxyfen											0,01	0,2			0,2	
Quinomethionate											0,5					
Quizalofop-P-Ethyl											0,1					
Sethoxydim	1,0											1,0			0,2	
Simazine			0,02								0,2	0,2		0,2	0,25	
Spinozad			0,1				0,1				**0,05**	0,5		**0,01**	0,2	**0,1**
Spirodiclofen			0,5								0,05	2,0			0,8	
Streptomycin												0,05			0,25	
Sulfosate												0,2			0,05	
Tebuconazole											0,5					
Tebufenozide	0,5		0,5	1,0								1,0		1,0	1,0	
Tebufenpyrad											0,05					
Teflubenzuron											0,2					
Terbacil												0,1			0,3	
Terbutryne											0,2					
Tetraconazole											0,05					
Tetradifon											5,0					

ANNEX

Pesticide	Argentina	Australia	Brazil	Canada	Chile	China	Colombia	EC	India	Indonesia	Israel	Japan	Singapore	South Africa	US	CODEX
Thiabendazole	3,0	10,0		10,0	10,0			5,0		10,0		3,0	10,0	6,0	10,0	
Thiacloprid											0,1	2,0		1,0	0,3	
Thiamethoxam			0,02								0,02	1,0		0,02	0,2	
Thiophanate Methyl	1,0		5,0	5,0	5,0			0,5	5,0	5,0	5,0	3,0	5,0	3,0	7,0	
Thiram	2,0			7,0				3,0				5,0	3,0	3,0	7,0	
Tolyfluanid											0,05					
Triadimefon	0,2	1,0	0,2					0,2		0,5	0,5	0,5	0,5	0,05	1,0	
Triadimenol											0,5					
Trichlorfon											2,0					
Trifloxystrobin			0,05					0,5			0,5	3,0		0,1	0,5	
Triflumizole			0,05	0,5								2,0			0,5	
Triflumuron											0,5					
Triforine																**2,0**
Ziram	2,0			7,0								5,0	3,0		7,0	

X,XX - Mean MRL more restrictive in comparison to the Codex.

ANNEX

Table 2 - Maximum Residue Level - MRL in Banana (mg/kg)

Pesticide	Argentina	Australia	Brazil	Canada	Chile	China	Colombia	EC	Japan	India	Indonesia	Israel	Singapore	South Africa	US	CODEX
Aldicarb			0,1						0,5							
Ametryn	0,25		0,07											0,2	0,25	
Azoxystrobin		0,5	0,2	1,0				2,0	2,0						2,0	
Benomyl					1,0					1,0	1,0		1,0	1,0		
Bifenazate									2,0							
Bifenthrin		0,1							0,1							
Bioresmethrin									0,1							
Bitertanol									0,5							**0,5**
Bromide íon									20,0							
Bromuconazole			0,5													
Cadusafos		0,01							0,01			0,01				**0,01**
Captafol									N.D.							
Carbaryl		5,0	0,2	5,0	5,0						5,0		---		10,0	
Carbendazim																**0,2**
Carbofuran	0,1	0,1	0,1		0,1		0,1				0,1		0,1		0,1	**0,1**
Chlorfluazuron									2,0							
Chlorothalonil	0,2	3,0	3,0		0,2		0,01		0,2		0,2		0,2		0,05	**0,01**
Chlorpyrifos	**0,01**	**0,5**	**0,01**				2,0		3,0			**0,05**		**1,0**	**0,1**	**2,0**
Clofentezine		0,01							0,01							
Cu Telephthalate									5,0							

ANNEX

Pesticide	Argentina	Australia	Brazil	Canada	Chile	China	Colombia	EC	Japan	India	Indonesia	Israel	Singapore	South Africa	US	CODEX
Cyhalothrin									0,5							
Cyhexatin									N.D.							
Daminozide									N.D.							
DCIP									0,2							
Deltamethrin									0,05							
Diazinon											---	0,05	0,5			
Dichlofluanid									5,0							
Dichlorvos									0,1							
Diethofencarb									5,0							
Difenoconazole		0,02	0,5						0,5							
Diurom	0,1		0,1							0,1					0,1	
Epoxiconazole		1,0	0,1													
Ethoprophos	0,02	0,05	NR				0,02		0,02			0,02			0,02	**0,02**
Etrimfos									0,2							
Fenamiphos	0,1	0,05	0,1		0,1		0,05				0,1	0,1	0,05	0,05		**0,05**
Fenarimol									1,0							**0,2**
Fenbutatin Oxide									10,0							**10,0**
Fenitrothion									0,2							
Fenobucarb									0,3							
Fensulfothion									0,02							
Fenvalerate									1,0							

ANNEX

Pesticide	Argentina	Australia	Brazil	Canada	Chile	China	Colombia	EC	Japan	India	Indonesia	Israel	Singapore	South Africa	US	CODEX
Fipronil		0,01							0,01							**0,005**
Fluazifop									0,1							
Flusilazole									0,1							**0,1**
Flutriafol			0,05													
Fosthiazate			0,2						---							
Glufosinate Ammonium			0,05				0,2		0,2						0,3	**0,2**
Glyphosate		0,2	0,02						0,2			0,2			0,2	
Hexaconazole									0,1							
Imazalil			**1,0**		2,0		2,0		2,0		---	2,0	**0,2**		3,0	**2,0**
Imidacloprid												0,01				
Iprodione									10,0							
Isofenphos		0,02							0,02							
Lenacil									0,3							
Malathion									2,0							
Maleic Hydrazide									0,2							
Mancozeb		2,0	**1,0**				2,0				---		**1,0**	3,0	4,0	**2,0**
Maneb							2,0				---		**1,0**	3,0		**2,0**
Methiocarb									0,05							
Myclobutanil				2,0			2,0		2,0						4,0	**2,0**
Oxadiazon												0,05				
Oxamyl		0,2			0,2				0,2		0,2	0,05	0,2	0,05	0,3	

ANNEX

Pesticide	Argentina	Australia	Brazil	Canada	Chile	China	Colombia	EC	Japan	India	Indonesia	Israel	Singapore	South Africa	US	CODEX
Oxyfluorfen												0,05				
Paclobutrazol									0,01							
Paraquat			0,05												0,05	
Parathion-Methyl									0,2							
Pendimethalin									0,05							
Permethrin									5,0							
Pirimicarb									0,5							
Pirimifos-Methyl									0,1							
Prochloraz		5,0							5,0							
Propiconazole	0,1	0,2	0,1		0,1	0,1	0,1		0,1		0,1		---	0,1	0,2	**0,1**
Prothiofos		0,01							0,01							
Pyraclostrobin		0,02	0,5												0,04	**0,02**
Pyrethrins									1,0							
Pyridaben		0,5							1,0							
Pyrimethanil		0,2	0,1	0,05					0,1						0,1	
Quinalphos									0,02							
Sethoxydim									1,0							
Simazine			0,02									0,2			0,2	
Sulfosato			0,05													
Tebuconazole		0,2	0,05	**0,03**		0,05	0,05		0,2						0,05	**0,05**
Terbufos		0,05	0,05			0,05	0,05		0,05						0,025	**0,05**

ANNEX

Pesticide	Argentina	Australia	Brazil	Canada	Chile	China	Colombia	EC	Japan	India	Indonesia	Israel	Singapore	South Africa	US	CODEX
Tetraconazole			0,2													
Thiabendazole	**3,0**	**3,0**	**3,0**	**0,4**	**3,0**	5,0	5,0				**3,0**	**3,0**	**3,0**	**3,0**	**3,0**	**5,0**
Thiacloprid			0,05													
Thiometon									0,05							
Thiophanate-Methyl			0,2								1,0		1,0		2,0	
Tolclophos-Methyl									0,1							
Tralomethrin									0,5							
Triadimenole			0,2													**0,2**
Trichlorfon		0,2	0,2						1,0							
Tridemorph			0,1					0,05							0,1	
Trifloxystrobin		0,05	0,05													**0,05**
Triflumizole									2,0							
Trifluralin									0,05							

X,XX - Mean MRL more restrictive in comparison to the Codex.

Table 3 - Maximum Residue Level - MRL in Grape (mg/kg)

Active Ingredient	Argentina	Australia	Brazil	Canada	Chile	China	Colombia	EC	India	Indonesia	Israel	Japan	Singapore	South Africa	US	CODEX
Abamectin			0,005					0,01			0,02	0,02			0,02	
Acetamiprid											0,05	5,0			0,2	
Aldicarb												**0,05**				**0,2**
Ametryne											0,01					
Aminotriazole											0,05					
Amitrol												**N.D.**				**0,05**
Azinphos-Methyl		2,0		5,0				1,0		4,0		1,0	4,0		4,0	
Azocyclotin																**0,2**
Azoxystrobin		2,0	0,5	3,0				2,0			0,6	10,0		1,0	1,0	**---**
Benalazyl + Mancozeb																**---**
Benalaxyl											1,0					**0,2**
Benfuracarb											0,01					
Benomyl	3,0	3,0		5,0		3,0		0,3		10,0		3,0	2,0	1,0	10,0	
Bifenazate							1,0					3,0			**0,75**	**1,0**
Bifenthrin		0,01	0,1					0,2			2,0	2,0			0,2	
Boscalid		4,0	3,0											5,0	3,5	
Bromopropylate																**2,0**
Buprofezin												1,0			0,4	
Cadusafos											0,05					
Captan	15,0	10,0	2,0	5,0				0,01		5,0	5,0	5,0		15,0	50,0	

ANNEX

Active Ingredient	Argentina	Australia	Brazil	Canada	Chile	China	Colombia	EC	India	Indonesia	Israel	Japan	Singapore	South Africa	US	CODEX
Carbaryl		5,0		5,0	5,0		5,0	**0,05**		5,0		**1,0**	5,0	**2,5**	10,0	**5,0**
Carbendazim											3,0					
Carbofuran												0,3			0,4	
Carbosulfan											0,1					
Carfentrazone-Ethyl		0,05										0,1			0,1	
Chinomethionat												0,1				
Chlorothalonil												0,5				**0,5**
Chlorpyrifos											1,0	1,0				**0,5**
Chlorpyrifos-methyl																**0,2**
Clofentezine					1,0		1,0	**0,02**				1,0			1,0	**1,0**
Cycloxydin											**0,2**	0,5				**0,5**
Cyfluthrin								0,3							1,0	
Cyhexatin												**N.D.**				**0,2**
Cypermethrin											1,0					
Cyproconazole												0,2				
Cyprodinil		**2,0**		**2,0**							**2,0**	5,0		**0,5**	**2,0**	**3,0**
D-2,4								0,05							0,5	
Deltamethrin												0,5				**0,2**
Diazinon				0,75				0,02			0,5	0,1	0,5		0,75	
Dichlofluanid											**1,0**	15,0				**15**
Dichlobenil		0,1										0,2			0,15	

ANNEX

Active Ingredient	Argentina	Australia	Brazil	Canada	Chile	China	Colombia	EC	India	Indonesia	Israel	Japan	Singapore	South Africa	US	CODEX
Dichlorvos											0,1					
Dicloran		10,0		10,0	10,0		7,0			10,0		7,0			10,0	**7,0**
Dicofol	**3,0**			**3,0**			5,0	**2,0**			5,0	**3,0**	5,0		5,0	**5,0**
Difeconazole											0,1	0,5				
Dimethoate					1,0			0,02		1,0	1,0	1,0	2,0	2,0	1,0	
Dinocap											**0,05**					**0,5**
Dinotefuran												10,0			0,9	
Dithianon																**3,0**
Dithiocarbamato											5,0					**5,0**
Diuron	0,5		0,1	1,0					1,0		0,5	0,05			1,0	
Esfenvalerate											0,5					
Endosulfan				1,0			1,0	**0,5**				1,0		**0,5**	2,0	**1,0**
Enxofre																
Ethephon		10,0	**0,1**	1,0			1,0	**0,05**		10,0	2,0	1,0		5,0	2,0	**1,0**
Ethoprophos												0,02				**0,02**
Etoxazole												1,0			0,5	
Famoxadone												2,0				**2,0**
Fenamidone												3,0				
Fenamiphos	0,1	0,05			0,1			0,02		0,1	0,1	0,06	0,05	0,05	0,1	
Fenarimol	**0,1**	**0,1**	**0,05**				0,3	0,3			0,3	1,0		**0,2**	**0,2**	**0,3**
Fenbuconazole											1,0					**1,0**

ANNEX

Active Ingredient	Argentina	Australia	Brazil	Canada	Chile	China	Colombia	EC	India	Indonesia	Israel	Japan	Singapore	South Africa	US	CODEX
Fenbutation oxide					5,0		5,0	**2,0**		5,0		5,0	5,0		5,0	**5,0**
Fenhexamid		10,0		4,0				5,0				20,0		5,0	4,0	
Fenpyroximate												2,0			1,0	
Fenpropathrin							5,0					5,0			5,0	**5,0**
Ferbam				7,0			5,0					5,0	5,0		7,0	**5,0**
Fluazifop Butyl											0,1					
Fludioxonil		2,0		**1,0**			2,0				**1,0**	5,0		**0,5**	**1,0**	**2,0**
Flumioxazin												0,1			0,02	
Flusilazole											0,5	0,5				**0,5**
Folpet	2,0		15,0	25,0			2,0	**0,01**		25,0	5,0	2,0	25,0	15,0	25,0	**2,0**
Forchlorfenuron												0,1			0,03	
Fosetyl												70,0				
Glufosinate Ammonium	0,1		0,05									0,3			0,05	
Glyphosate	0,2		0,2					0,5				0,2			0,2	
Haloxyfop											0,05					**0,05**
Hexaconazole											0,1					
Hexythiazox							1,0					2,0			**0,75**	**1,0**
Hidróxido de Cobre																
Imibenconazole												5,0				
Imidacloprid			**0,1**	1,5			1,0				**0,1**	3,0		**0,05**	1,0	**1,0**
Iprodione	**5.0**	20,0	**1,0**	10,0	10,0		1,0	10,0	10,0	10,0	10,0	25,0	10,0	**5,0**	60,0	**10,0**

ANNEX

Active Ingredient	Argentina	Australia	Brazil	Canada	Chile	China	Colombia	EC	India	Indonesia	Israel	Japan	Singapore	South Africa	US	CODEX
Iprovalicarb											0,05					
Kresoxim-Methyl	**0,5**		**0,5**	1,0			1,0	1,0			0,5	20(FAS) 15		**0,5**	1,0	**1,0**
Lambda Cyhalothrin											0,2					
Malathion		8,0		8,0	8,0	8,0	8,0	**0,5**		8,0	**2,0**	8,0	8,0	**2,0**	8,0	**8,0**
Mancozeb	5,0		3,0	7,0			5,0	2,0				5,0	5,0	3,0	7,0	**5,0**
Maneb				7,0			5,0	**2,0**				5,0	5,0	3,0	7,0	**5,0**
Metalaxyl	1,0	1,0		1,0	1,0	1,0	1,0	2,0			1,0	1,0	1,0	1,5	2,0	**1,0**
Methidathion								**0,05**								**1,0**
Methiocarb											0,05					
Methomyl		**2,0**		**4,0**	5,0		5,0	0,05		5,0	5,0	5,0	2,0		5,0	**5,0**
Methoxyfenozide							1,0				2,0	1,0			1,0	**1,0**
Metominostrobin											0,2					
Mevinphos								0,1					0,5	0,2	0,5	
Myclobutanil	**0,5**	1,0	**0,5**	1,0			1,0	1,0	1,0		1,0	1,0		**0,2**	1,0	**1,0**
Oxydemeton-Methyl								0,02				0,06	1,0		0,1	
Oxyfluorfen		0,05										0,05			0,05	
Parathion-Methyl											0,5	**0,2**				**0,5**
Penconazole											0,2	0,2				**0,2**
Permethrin												5,0				**2,0**
Phosalone				5,0				1,0		5,0		1,0	5,0		10,0	
Phosmet				10,0	10,0		10,0			10,0		10,0	10,0		10,0	**10,0**

ANNEX

Active Ingredient	Argentina	Australia	Brazil	Canada	Chile	China	Colombia	EC	India	Indonesia	Israel	Japan	Singapore	South Africa	US	CODEX
Piperonyl Butoxide				8,0								8,0	8,0	5,0	8,0	
Procymidone	**1,5**		5,0	5,0	5,0	5,0	5,0	5,0				5,0		5,0	5,0	**5,0**
Propargite	**2.0**			7,0	10,0		7,0			10,0		7,0	10,0		10,0	**7,0**
Propiconazole												0,5				**0,5**
Propyzamide												0,06		0,1	0,1	
Pyraclostrobin		2,0	2,0					1,0			0,5	2,0		0,5	2,0	
Pyrethrins				1,0				1,0				1,0	1,0	1,0	1,0	
Pyridaben		5,0		0,3								2,0			1,5	
Pyrimethanil		5,0	5,0	5,0								10,0		5,0	5,0	
Pyriproxyfen			5,0									0,1			2,5	
Quinoxyfen		2,0						1,0				1,0		1,0	0,6	
Sethoxydim	1,0											1,0			1,0	
Simazine			0,02									0,2		0,2	0,25	
Spinosad		0,5					0,5				**0,2**	0,5		**0,01**	0,5	**0,5**
Spirodiclofen												5,0			2,0	
Sulfosate			0,05					0,05				0,2			0,1	
Sulfur Dioxide														50,0	10,0	
Tebuconazole	**0,2**	2,0	2,0	5,0			2,0				2,0	2,0		2,0	5,0	**2,0**
Tebufenozide		2,0		**0,5**			2,0					**0,5**			3,0	**2,0**
Teflubenzuron											1,0					
Tetraconazole											0,05					

ANNEX

Active Ingredient	Argentina	Australia	Brazil	Canada	Chile	China	Colombia	EC	India	Indonesia	Israel	Japan	Singapore	South Africa	US	CODEX
Thiamethoxam											0,3					
Thiophanate-Methyl		3,0	5,0	5,0	10,0			0,1		10,0		3,0	10,0		5,0	
Tolylfluanid																**3,0**
Triadimefon	0,5	1,0	2,0		0,5		0,5	2,0		2,0	2,0	0,5	1,0	2,0	1,0	**0,5**
Triadimenol											2,0	0,5				**2,0**
Trifloxystrobin		**0,5**					3,0	5,0			**1,0**	3,0		**0,5**	**2,0**	**3,0**
Triflumizole		0,5	0,1	2,5								2,0			2,5	
Vinclozolin																**5,0**
Ziram	5,0			7,0			5,0						5,0		7,0	
Zoxamide			0,5	3,0				5,0						2,0	3,0	

X,XX - Mean MRL more restrictive in comparison to the Codex.