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**Identifying Maximum Residue Limit (MRL)
Regulations Faced by Michigan Fruit Industries**

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1. Introduction

Maximum residue limits (MRLs) are the maximum level of a specified pesticide compound allowed to remain on a food or feed product in order to gain market entry. Most, if not all nations employ MRLs to govern the sale of agricultural products. While the majority of these standards are likely considered justified commercial limitations, governments may also impose such technical barriers to limit imports and isolate domestic markets from international competition. Wilson and Otsuki (2004) found that stringent regulation of the pesticide chlorpyrifos by OECD countries on banana exports lead to a decrease of imports by 63 percent (Wilson and Otsuki 2004). In the case of cereals from African countries stringent MRL regulation in the UK caused a reduction of 64 percent in exports (Otsuki *et al.* 2001). Moreover, they estimated that there is approximately US\$ 5.5 billion in lost banana exports and \$670 million in cereal exports per year when international standard were set at the EU levels of regulatory stringency instead of using the CODEX standard (Otsuki *et al.* 2001; Wilson and Otsuki 2004)

Some countries which have not established their own MRLs will adopt Codex standards; however, many major Michigan trading partners (e.g., EU, Japan) have regulatory agencies which establish independent MRLs permitted in food. Beyond consideration of absolute residue levels allowed in a given food item, discrepancy among trading partners important to Michigan fruit industries creates an additional barrier to trade, particularly for small and mid-sized firms where accessing information in a readily available and understandable format can be an insurmountable impediment.

Recently several major Michigan trading partners have revised their MRL policies and it is critical that Michigan fruit industry participants are aware of, and understand, the new limits. A border rejection will often result in bans on future trade (or increasingly stringent inspection requirements - with associated increase in costs) for that exporter, or often for the entire product category thus increasing costs industry-wide. For example, in the 1990s, when imports of vegetables from Guatemala to the US were rejected because of the high residue levels, it caused farm prices in Guatemala to drop more than 40 percent, for a situation that was totally preventable (Dinham 2003).

Some of the most important recent changes offer an example of how countries and international organizations continuously revise their MRLs. In May 29, 2006 the Ministry of Health, Labor and Welfare (MHLW) in Japan introduced the positive list system for agricultural chemicals (including pesticides, feed additives and veterinary drugs) remaining in all foods. This comprehensive system to prohibit the distribution of foods containing agricultural chemicals above a certain level replaced a former regulation that set MRLs for a very limited number of food products. Similarly, in April 2009, The Codex Alimentarius Commission identified 144 existing pesticides that will be withdrawn from its list of acceptable pesticides.

In September 2, 2008 the EU implemented Regulation EC No. 396/2005, designed to provide full harmonization for all pesticide MRLs in or on fruits and vegetables among member countries and replace previous legislation. Approximately 240 compounds were identified as still in use either in or outside the EU. These are now subject to the European harmonization program, which involves establishing temporary European-wide MRLs which will then be

subject to a detailed scientific assessment leading to the establishment of final EU MRLs. Approximately 660 pesticides were identified as obsolete (no longer used) and MRLs were set at the limit of determination, which is the lowest level surveillance laboratories can achieve in monitoring analysis. As scientific methods advance, this level of detection will become ever-more stringent. Specialty crops are at a disadvantage in such a system as they constitute minor uses for many compounds and are often overlooked and/or regulated by default categories that may not directly apply.

The primary objective of this project is to provide information for Michigan apple, blueberry and cherry growers and processors regarding current MRL regulations in key markets that will assist in expanding or maintaining market access.

2. Background: The Need for International MRL Standards

“Food safety is a basic human right” and all countries are responsible and must be involved in setting the best framework to assure it (WHO 2002). All pesticides are toxic at some level to some organisms, and they can cause health hazards to humans and animals when they are consumed in food or exposed in the environment (Wilson and Otsuki 2004). There are approximately 1400 pesticides in use worldwide which represents around 739,000 tons in global consumption each year (FAO 2010). The most commonly used pesticides in agriculture are herbicides, insecticides, rodenticide and fungicides (Wilson and Otsuki 2004). Fruit and vegetable account for the largest share of the pesticide markets with an estimated \$8 billion a year in total global sales (Dinham 2003)

Rapid integration of economies and societies has led to complex and integrated food supply chains in which food safety frameworks are essential to protect public health. However, food safety frameworks are often not coordinated and lack harmonization and these disparities can easily result in barriers to trade (Garrett *et al.* 1998; Boisrobert *et al.* 2010). Harmonization, or “the establishment, recognition and application of common sanitary and phytosanitary measures by different countries” (Garrett *et al.* 1998) is essential to assure people from different countries safety of their food supply, protection of their and the global environment and fair trade for all.

Among the international organizations working to promote harmonized food safety standards, the most visible are the World Trade Organization (WTO) and the joint FAO/WHO effort to promote the Codex Alimentarius

2.1 The World Trade Organization

Over the years, there has been an on-going discussion among countries to work towards more harmonized food safety regulations that would increase global trade while protecting people. In 1994, 150 countries agreed to adopt, among other regulations, sanitary and phytosanitary (SPS) and technical barriers to trade (TBT) standards. The 1994 agreement also resulted in creation of the World Trade Organization (WTO).

As an international organization, The WTO is in charge of setting and enforcing global rules for trade among its member countries. Within the general stipulations of the WTO, member countries sign agreements which are legal rules for international commerce. One of those trade agreements is the SPS agreement which covers the following general topics:

- Control the entry and spread of pest, disease, disease-carrying organisms, or disease-causing organisms.
- Control of additives, contaminants, toxins, or disease-causing organisms in foods, beverages, or feedstuffs.
- Protection of people against diseases carried by animals, plants, or products
- Prevention or reduction of risk and damages caused but the entry, establishment, or spread of pests.

The main objective of the SPS agreement is to facilitate trade while creating a system that would protect countries from harmful diseases and contaminants. The following principles are the foundation of the SPS agreement:

1. Harmonization: which means that member countries should work toward the adoption of standards, guidelines and recommendations similar or equivalent to each other so that there are reduced discrepancies and trade can become more open.
2. Equivalence: while the WTO recognizes the difference measures and standards each country adopts, it encourages members to recognize equivalence of measures established by other members when possible.
3. Non-discriminatory: which means that as part of the WTO all countries should treat domestic and imported products the same.
4. Transparency: the WTO establishes that member countries need to notify trading partners of any changes in their SPS measures. This is of particular importance when the measure is different from existing international standards.
5. Regionalization: the WTO promotes exports from disease-free areas in affected countries.

While the SPS agreement promotes freedom to set appropriate levels of SPS measures, when these measures do not align to international standards they should be based on scientific evidence to demonstrate why the measures were established and how they are designed to control risks.

2.2 *The Codex Alimentarius*

The Codex Alimentarius is “a collection of standards, codes of practice, guidelines and other recommendations”. It is a food code used as global reference for international trade. The Codex, as it is usually known, deals with multiple requirements related to food production, processing and management, and regulatory aspects in the food system. Its main objectives are to protect public health by guaranteeing standards for food safety, and fair practices in food trade. Maximum residue limits (MRLs) for residues of pesticides or veterinary drugs in foods are one topic area covered by the Codex.

The Codex Alimentarius Commission was established by the Food and Agriculture Organization of the United Nations (FAO) and the World Health Organization (WHO) in the 1960s. It has become one of the most visible sources for food-related scientific and technological research and discussion. Codex committees provide a forum for regulators and scientists to meet, exchange information and ideas, develop working relationships, and solve problems that increase the safety of foods worldwide (Garrett *et al.* 1998).

While the Codex is not part of the WTO, it has become relevant in global food trade. As part of the WTO SPS agreement and the TBT agreement which encourage the international

harmonization of food standard, Codex serves as benchmark against which food standards from individual countries are measured and regulations can be evaluated within the WTO agreements (i.e. while Codex has no legal authority to enforce their standards, national policies which set measures equal to the standards promulgated by Codex are deemed to be consistent with the relevant WTO/GATT Agreement provisions). Another important contribution of Codex is the programmatic and systematic mediation to move towards a consensus of opinion on regulatory issues. This consensus is achieved by coordinating more than 150 countries which represent more than 97% of the world's population (Garrett *et al.* 1998).

3. Maximum Residue Limits by Countries

Each country has the right to establish their own MRL standards. In the following paragraph, information about most important trading partners for the Michigan fruit industry and information about the US source of information are briefly presented with respective internet links to access more information.

3.1 Australia

The Australian Pesticides and Veterinary Medicines Authority (APVMA) sets MRLs for agricultural and veterinary chemicals in agricultural products in Australia. The APVMA overviews all pesticides that enter the food chain and determines acceptable levels according to a stringent process of analysis, tests and revisions to previous regulations. Detailed information about the procedures is available at <http://www.apvma.gov.au/residues/standard.php#tables>

3.2 Canada

Health Canada (HC) sets the MRL limits to ensure food safety in Canada. MRLs are determined for each pesticide and crop with a goal to identify levels well below the amount that could pose a health concern. Whenever there is a need to differentiate processed products from raw agricultural products, HC provides a separate MRL specification. For detailed information on individual MRLs, HC maintains the following page: <http://www.hc-sc.gc.ca/cps-spc/pest/part/protect-proteger/food-nourriture/mrl-lmr-eng.php>

3.3 The European Union (EU)

The European Commission (EC) and member states shared the responsibility of setting MRLs and establish the legislation for pesticide residue. In addition, The European Food Safety Authority (EFSA), an advisory office of the European Union (EU), is in charge of assessing food and feed safety for the entire EU. EFSA works in collaboration with other member states to provide “independent scientific advice and clear communication on existing and emerging risks” however, each member state can independently set independent MRLs.

The Official Journal of the European Union (OJEU) and each member state provides legal information about MRLs. The EU also keeps a database with information about MRLs but this is just for reference and has no legal value. This database is available at: http://ec.europa.eu/sanco_pesticides/public/index.cfm#

3.4 Japan

The Ministry of Health, Labor and Welfare (MHLW) regulates MRLs in Japan. MHLW maintains a list of maximum residues allowed in food and agricultural products. This document is known as “the positive list”. Detailed information about the positive list is available at:

<http://www.mhlw.go.jp/english/topics/foodsafety/positivelist060228/introduction.html>

3.5 Mexico

The joint Inter-ministerial commission called CICLOPLAFEST (Ministries of Commerce, Agriculture, Ecology and Health) has the mandate to control the process and use of pesticides, fertilizers and toxic substance in Mexico. In addition, the Federal Commission for the Protection against Sanitary Risk (COFEPRIS for its acronym in Spanish), part of the Ministry of Health distributes the sanitary regulation and controls and promotes safety standards. COFEPRIS manages a database with MRL information which is available in Spanish from their web page http://www.cofepris.gob.mx/wb/cfp/catalogo_de_plaguicidas

3.6 South Korea

The Korea Food and Drug Administration (KFDA) agency is in charge of setting MRLs as well as enforcing these regulations in South Korea. In the event that the KFDA does not have an established MRL, the agency usually consults the CODEX. However, whenever there is a conflict with the interpretation of the Codex regulation, the Korean test prevails. While the KFDA offers a web page in English with information about MRL, this version is not an official translation and the Korean version always prevails in case of disputes. An unofficial list of MRLs is available at <http://eng.kfda.go.kr/index.php>

3.7 USA

In the US, the Environmental Protection Agency (EPA) regulates and establishes MRLs or “tolerances” of pesticides that growers can use to produce food and that should remain in food once it is marketed (Boisrobert *et al.*). All pesticides must be registered after undergoing a process of scientific testing to demonstrate pesticides are not dangerous for people or the environment. This process is continuous, which means that once a pesticide limit has been established it can be revised and changed.

The EPA works with other government agencies to enforce MRLs in food. The federal Food and Drug Administration (FDA) tests food produced in the United States and food imported from other countries while the U.S. Department of Agriculture (USDA) tests meat and milk. EPA also works with state agencies to enforce food safety regulations. The main web page for the EPA pesticide regulation office is <http://www.epa.gov/pesticides>

4. Maximum Residue Limits by Crops

The following tables were compiled in 2010 and are subject to change. To update information please see the sources cited in Section 3 above.

4.1 Apples

Chemical Ingredient	Country, Region, Organization							
	US	CODEX	EU	Canada	Japan	Mexico	South Korea	Australia
	----- (PPM) -----							
Herbicides								
2,4-D, dimeth. Salt 1	0.05	0.01	0.05		0.01		2	
Diuron 2	0.1		0.05		0.05			
Glyphosate iso. Salt 3	0.2		0.1		0.2	0.2	0.2	0.05
Oryzalin 4	0.05		0.01		0.08	0.05	0.05	
Paraquat 5	0.05	0.01	0.02		0.05	0.05		
Simazine 6	0.2		0.1		0.2	0.25	0.25	
Terbacil 7	0.3				0.1			0.04
Insecticides								
Abamectin 8	0.02	0.02	0.01	0.02	0.02	0.02	0.02	
Acetamiprid 9	1		0.1	1	5		0.3	
Azinphos-methyl ¹⁰	1.5	2	0.05	2	2	2	1	2
Benzoic acid ¹¹	1.5						0.5	
Carbaryl ¹²	12		0.05	5	1	10	1	5
Chlorpyrifos ¹³	0.01	1	0.5	0.01	1	1.5	1	0.5
Clofentezine ¹⁴	0.5	0.5	0.5	0.5	1	1	1	0.1
Dimethoate ¹⁵	2	1	0.02	2	1	2	1	
Endosulfan ¹⁶	1		0.05	2	1	2		1
Esfenvalerate ¹⁷	1		0.05		2	2		
Etoxazole ¹⁸	0.2		0.02		0.5		0.5	0.2

Chemical Ingredient	Country, Region, Organization							
	US	CODEX	EU	Canada	Japan	Mexico	South Korea	Australia
	----- (PPM) -----							
Fenbutatin-oxide ¹⁹	15	5	2	3	5		5	3
Fenpropathrin ²⁰	5	5	0.01		5		5	
Fenpyroximate ²¹	0.4	0.3	0.2		0.5		0.5	0.3
Hexythiazox ²²	0.25	0.5	1		1		0.3	1
Imidacloprid ²³	0.5	0.5	0.5	0.5	0.5		0.5	0.3
Lambda-cyhalothrin ²⁴	0.3	0.2	0.1	0.07	0.4		0.2	
Methomyl ²⁵	1		0.2	0.5	3	1	1	1
Novaluron ²⁶	2	3	2	2	3		1	1
Permethrin ²⁷	0.05	2	0.05	1	2	0.05	0.05	1
Phosmet ²⁸	10	3	0.2	10	10	10	10	1
Pyridaben ²⁹	0.5		0.5	0.5	2	0.6	1	0.5
Spinosad ³⁰	0.2	0.1	1	0.1	0.5	2		0.5
Thiacloprid ³¹	0.3	0.7	0.3	0.3	2	0.06	0.3	1
Thiamethoxam ³²	0.2		0.2	0.02	0.3		0.3	
Fungicides								
Basic copper sulfate ³³			5					
Captan ³⁴	25	15	3	5	5	25	5	10
Copper hydroxide ³⁵			5					
Copper oxychlo. sul. ³⁶			5					
Copper oxychloride ³⁷			5					
Copper sulfate ³⁸			5					
Cyprodinil ³⁹	0.1	0.05	1	0.1	5		1	0.05
Fenarimol ⁴⁰	0.1	0.3	0.3		1	0.1	0.3	0.2
Kresoxim-methyl ⁴¹	1	0.2	0.2	0.15	5	1	2	0.1
Mancozeb ⁴²	7	5	5	7	5	7		3
Metiram ⁴³	2	5	5	7	5	2		3
Myclobutanil ⁴⁴	0.5	0.5	0.5	0.5	5	0.5	0.5	0.5
Oxytetracycline	0.35				0.05			

Chemical Ingredient	Country, Region, Organization							
	US	CODEX	EU	Canada	Japan	Mexico	South Korea	Australia
	----- (PPM) -----							
Pyrimethanil ⁴⁵	14	7	5	3	5		2	0.05
Streptomycin ⁴⁶	0.25	***	***	***	0.05	0.25		
Streptomycin sulfate ⁴⁷	0.25	***	***					
Thiophanate-methyl ⁴⁸	2	***	0.5		3	7		
Thiram ⁴⁹	7	5	5	7	5		0.3	3
Triadimefon ⁵⁰	1	3	0.2		0.05	1	0.5	1
Trifloxystrobin ⁵¹	0.5	0.7	0.5		3	5	0.5	0.3
Ziram ⁵²	7	5	0.1	7	5	7		3
Other chemicals								
Benzyladenine ⁵³					0.1			
Ethephon	5	5	0.5	3	5		5	
Gibberellins A4A7 ⁵⁴					0.2			
NAA ⁵⁵	1	***		***				
Prohexadione calcium ⁵⁶	3	***	0.05		2			
Spirodiclofen	0.8	***	0.8	0.8	2		1	

Observations

1. The US, CODEX, the EU do not have a specific MRL for the 2,4-D/Apple combination. This MRL is for the "Fruit, Pome, Group 11" or the "Pome fruit" group. Canada does not maintain a specific MRL for this ingredient but the MRL regulation states that "Where no specific MRL has been established, a general MRL of 0.1 ppm applies, which means that pesticide residues in a food commodity must not exceed 0.1 ppm"
2. The EU does not maintain a specific MRL for the Diuron/Apple combination, but does maintain an MRL for its "Pome fruit" group. For Canada, see footnote 1
3. The US, the EU and Australia do not maintain a specific MRL for the Glyphosate/Apple combination, but they maintain an MRL "Fruit, Pome, Group 11" or "Pome fruit" group. In Australia the MRL has been set "at or about" the limit of analytical quantitation.
4. The US and the EU do not maintain a specific MRL for the Oryzalin/Apple combination, but they maintain an MRL "Fruit, Pome, Group 11" and "Pome fruit" group.

5. The US, the EU and the CODEX do not maintain a specific MRL for the Paraquat dichloride/Apple combination. The US and the CODEX maintain an MRL for "Fruit, Pome, Group 11" and "Pome fruit" group. The EU MRL is for "Fruit Fresh or Frozen; Nuts" group.
6. The EU does not maintain a specific MRL for the Simazine/Apple combination, but does maintain an MRL for "Fruit Fresh or Frozen; Nuts" group.
7. Australia does not report for Terbacil apples but reports for pome fruits. In Australia the MRL has been set "at or about" the limit of analytical quantitation.
8. The EU does not maintain a specific MRL for the Abamectin/Apple combination, but does maintain an MRL for its "Pome fruit" group.
9. The US and the EU do not maintain a specific MRL for the Acetamiprid/Apple combination, but they maintain an MRL for "Fruit, Pome, Group 11" and "Pome fruit" group.
10. In the US Azinphos-methyl will be deregistered as of September 30, 2012. Australia reports for "Pome fruits"
11. Bezoic acid is a food preservative. The EU does not require a MRL
12. The US and Australia do not maintain a specific MRL for the Carbaryl/Apple combination, but they maintain an MRL for its "Fruit, Pome, Group 11" and "Pome fruit" group.
13. The EU and the CODEX do not maintain a specific MRL for the Chlorpyrifos/Apple combination, but they maintain an MRL for "Pome fruits" group. In Australia, the MRL, residue definition or use is temporary to enable further experimental work and will be reconsidered at some future date. In some cases the MRL is being phased out.
14. The EU and the CODEX do not maintain a specific MRL for the Chlorpyrifos/Apple combination, but they maintain an MRL for "Pome fruits" group.
15. The US maintains an MRL of 2 for pears and The CODEX maintains an MRL of 1 also for pears; EU it Indicates lower limit of analytical determination
16. Australia reports for "Pome Fruits"
17. The EU does not maintain a specific MRL for the Esfenvalerate/Apple combination, but does maintain an MRL for "Pome fruit" group. The Japanese page does not have a MRL for this ingredient
18. The US, the EU and Australia do not maintain a specific MRL for the Etoxazole/Apple combination, but maintain an MRL for "Fruit, Pome, Group 11" and "Pome fruits" group. Australia reports for "Pome fruits"
19. The EU, the Codex and Australia do not maintain a specific MRL for the Fenbutatin-oxide/Apple combination, but maintain an MRL for its "Pome fruits" group.
20. The US does not maintain a specific MRL for Fenpropathrin/Apple combination, but maintains an MRL for "Pome Fruit, group 11"; The EU it Indicates lower limit of analytical determination
21. The US does not maintain a specific MRL for the Fenpyroximate/Apple combination, but does maintain an MRL of 0.4 PPM for its "Fruit, Pome, Group 11" group

22. The US and Australia do not maintain a specific MRL for the Hexythiazox/Apple combination, but maintain MRL for "Fruit, Pome, Group 11" and "Pome Fruits" group.
23. The EU does not maintain a specific MRL for the Imidacloprid/Apple combination, but does maintain an MRL for "Pome fruit" group.
24. The US, The EU and the CODEX do not maintain a specific MRL for the Lambda Cyhalothrin/Apple combination, but maintain an MRL for "Fruit, Pome, Group 11" and "Pome Fruits" group.
25. The EU does not maintain a specific MRL for the Methomyl/Apple combination, but does maintain an MRL for its "Pome fruit" group.
26. The Codex and Australia do not maintain a specific MRL for the Novaluron/Apple combination, but maintain an MRL for "Pome fruits" group. In Australia, the MRL, residue definition or use is temporary to enable further experimental work and will be reconsidered at some future date. In some cases the MRL is being phased out.
27. The US, the EU, the CODEX and Australia do not maintain a specific MRL for the Permethrin/Apple combination, but maintain an MRL for its "Fruit, Pome, Group 11", "Pome Fruits" and "Fruit Fresh or Frozen; Nuts" group. Australia doesn't have a MRL for Permetrin but maintains a MRL for cypermetrin.
28. The EU, the Codex and Australia do not maintain a specific MRL for the Phosmet/Apple combination, but maintain an MRL for its "Pome fruits" group.
29. The EU and Australia do not maintain a specific MRL for the Pyridaben/Apple combination, but maintain an MRL for its "Pome fruit" group.
30. The US and Australia do not maintain a specific MRL for the Spinosad/Apple combination, but maintain an MRL for its "Fruit, Pome, Group 11" and "Pome Fruit" group.
31. The EU, the Codex and Australia do not maintain a specific MRL for the Thiacloprid/Apple combination, but maintain an MRL for "Pome fruits" group.
32. The US does not maintain a specific MRL for the Thiamethoxam/Apple combination, but does maintain an MRL for "Fruit, Pome, Group 11" group. Canada maintain an MRL for "all food crops" group
33. In the US is listed as organic compound; EU listed as copper compounds
34. The EU, Australia and the Codex do not maintain a specific MRL for the Captan/Apple combination, but maintain an MRL for "Pome fruits" group.
35. In the US is listed as organic compound; EU listed as copper compounds
36. In the US is listed as organic compound; EU listed as copper compounds
37. In the US is listed as organic compound; EU listed as copper compounds
38. In the US is listed as organic compound; EU listed as copper compounds; Mexico list it as "exempt"
39. The US, the EU, Australia and Canada do not maintain a specific MRL for the Cyprodinil/Apple combination, but maintain an MRL for "Pome Fruits Group 11" and "Pome Fruits" group.

40. The EU, the Codex and Australia do not maintain a specific MRL for the Fenarimol/Apple combination, but maintain an MRL for "Pome fruits" group.
41. For the US check link <http://www.epa.gov/EPA-PEST/1999/June/Day-10/p14761.htm>; The CODEX and Australia report for "Pomme fruits" group.
42. The EU, CODEX and Australia do not maintain a specific MRL for the Mancozeb/Apple combination, but maintain an MRL for "Pome fruits" group. Japan reports an MRL for carbon disulfide in which mancozeb is included.
43. The EU, CODEX and Australia do not maintain a specific MRL for the Metiram/Apple combination, but maintain an MRL for "Pome fruits" group. Japan reports an MRL for carbon disulfide in which metiram is included.
44. The EU, Codex and Australia do not maintain a specific MRL for the Myclobutanil/Apple combination, but maintain an MRL for "Pome fruits" group.
45. The US, the EU, CODEX and Australia do not maintain a specific MRL for the Pyrimethanil/Apple combination, but maintain an MRL for "Fruit, Pome, Group 11" and "Pome fruits" group.
46. The US does not maintain a specific MRL for the Streptomycin/Apple combination, but does maintain an MRL for "Fruit, Pome, Group 11" group.
47. The US MRL for Streptomycin sulfate is available at <http://pmep.cce.cornell.edu/profiles/fung-nemat/febuconazole-sulfur/streptomycin/fung-prof-streptomycin.html>
48. The US MRL for Thiophanate-methyl is available at <http://www.epa.gov/EPA-PEST/2006/September/Day-20/p15471.htm>
49. Australia and CODEX do not maintain a specific MRL for the Thiram/Apple combination, but maintain an MRL for "Pome fruits" group. Japan page does not have a MRL for this ingredient.
50. The US MRL for Triadimefon is available at <http://www.epa.gov/fedrgstr/EPA-PEST/2008/September/Day-24/p22078.htm>; CODEX MRL is undefined and based on triadimenol use only ; The EU is based on lower limit of analytical determination
51. The US and Australia do not maintain a specific MRL for Trifloxystrobin but maintain MRL for "Pome Fruits"; The US MRL is available at <http://www.epa.gov/opprd001/factsheets/trifloxystrobin.pdf> ; CODEX reports an undefined MRL
52. Australia and CODEX do not maintain a specific MRL for the Ziram/Apple combination, but maintain an MRL for "Pome fruits" group. Japan maintains an MRL for carbon disulfide in which Ziram is included
53. In the US Benzyladenine is exempt from minimum tolerance <http://www.epa.gov/fedrgstr/EPA-PEST/2004/April/Day-02/p7475.htm>
54. In the US Gibberellins A4A7 is listed as organic compound
55. Information for NAA is available from http://www.epa.gov/opp00001/reregistration/REDS/naa_amendment.pdf; Check page 10 for information on CODEX and Canada
56. The US MRL for Prohexadione calcium is available at <http://www.epa.gov/opprd001/factsheets/prohexadione.pdf> check page 6; EU lower limit of analytical determination

4.2 Tart Cherries

Chemical Ingredient	Country, Region, Organization							
	US	CODEX	EU	Canada	Japan	Mexico	South Korea	Australia
	----- (PPM) -----							
2,4-D, dimeth. Salt 1	0.05	0.05	0.05	0.1	0.2	0.1	0.05	
Diuron 2	---		0.05	0.1				
Glyphosate iso. Salt 3	0.2	---	0.1	0.1	0.2	0.2	0.2	0.2
Paraquat 4	0.05	0.01	0.02	0.1	0.05	0.01	0.05	0.05
Simazine 5	0.25	---	0.25	0.1	0.2	0.25	0.25	0.1
Insecticides								
Azinphos-methyl 6	2	2	0.05	1	2	1	2	2
Carbaryl 7	10	---	0.05	10	10	1	10	5
Chlorpyrifos 8	1	---	0.3	0.1	1	0.5	1	
Clofentezine 9	1	0.5	0.02	0.1	0.2	0.2	1	0.1
Esfenvalerate ¹⁰	3	---	0.02	0.1	2		3	1
Imidacloprid ¹¹	3	---	0.5	3	3		3	0.5
Lambda-cyhalothrin ¹²	0.5	0.3	0.1	0.1	0.5	10	20	10
Permethrin ¹³	4	2	0.05	0.1	5	5	4	
Phosmet ¹⁴	10	---	1	7	0.1		10	1
Thiamethoxam ¹⁵	0.5	---	0.5	0.02	5		0.5	
Fungicides								
Boscalid ¹⁶	1.7	3	3	1.7	3	3	1.7	
Captan ¹⁷	50	25	5	5	5	5	50	15
Chlorothalonil ¹⁸	0.5	0.5	0.01	0.5	0.5	0.5	0.5	10
Dodine ¹⁹	3	3	5	2	3	2	3	0.05
Fenbuconazole ²⁰	1	1	1	0.8	1	2	1	
Myclobutanil ²¹	5	2	1	1	4	1	5	
Propiconazole ²²	1	---	0.05	1	1	1	1	2
Pyraclostrobin ²³	2.5	1	0.3	0.7	2	1	2.5	

Chemical Ingredient	Country, Region, Organization							
	US	CODEX	EU	Canada	Japan	Mexico	South Korea	Australia
	----- (PPM) -----							
Tebuconazole ²⁴	5	5	5	3	5		0.5	
Thiophanate-methyl ²⁵	20	---	0.3	5	3	2	20	10
Trifloxystrobin ²⁶	2	3	1	0.1	2	3	2	
Ziram ²⁷	7	0.2	5	7	7	0.2	7	3
Other chemicals								
Ethephon ²⁸	10	10	3	2	10	10	10	15
Spirodiclofen ²⁹	1	---	0.2	1	5		1	

1. The US and CODEX do not maintain a specific MRL for the 2,4-D/Cherry, Tart combination, but maintain an MRL for their "Fruit, Stone, Group 12" and "Stone fruits" group. The EU indicates the lower limit of analytical determination. Canada does not report a specific MRL for the Diuron/Cherry combination but maintains a "general MRL" unless a specific MRL has been established. Mexico follows the US MRL
2. EPA does not report an MRL for Diuron for cherries; The EU indicates the lower limit of analytical determination. Canada does not report a specific MRL for the Glyphosate/Cherry combination but maintains a "general MRL" unless a specific MRL has been established.
3. The US and Australia do not maintain a specific MRL for the Glyphosate/Cherry, Tart combination, but maintain an MRL for their "Fruit, Stone, Group 12" and Stone fruits" group. The EU MRL indicates the lower limit of analytical determination. Canada does not report a specific MRL for the Paraquat/Cherry combination but maintains a "general MRL" unless a specific MRL has been established.
4. The US and CODEX do not maintain a specific MRL for the Paraquat dichloride/Cherry, Tart combination, but maintain an MRL for their "Fruit, Stone, Group 12" and "Stone fruits" group. The EU MRL indicates the lower limit of analytical determination. Australia maintains an MRL for its "Fruit" group. Mexico follows the US MRL and Korea the CODEX MRL.
5. Australia does not maintain a specific MRL for the Simazine/Cherry, Tart combination, but does maintain an MRL for its "Fruit" group. Canada does not report a specific MRL but maintains a "general MRL" unless a specific MRL has been established.
6. Azinphos-methyl will be deregistered in the US in September 30, 2012. The EU and Australia do not maintain a specific MRL for the Azinphos-methyl/Cherry, Tart combination, but maintain an MRL for their "Stone fruit" group.
7. The US does not maintain a specific MRL for the Carbaryl/Cherry, Tart combination, but does maintain an MRL for its "Fruit, Stone, Group 12" group. The EU MRL indicates the lower limit of analytical determination. Mexico follows the US MRL
8. Mexico follows the US MRL for Chlorpyrifos. Canada does not report a specific MRL but maintains a "general MRL" unless a specific MRL has been established.

9. Codex and Australia do not maintain a specific MRL for the Clofentezine/Cherry, Tart combination, but maintain an MRL for their "Stone fruits" group. Canada does not report a specific MRL but maintains a "general MRL" unless a specific MRL has been established.
10. The US and Australia do not maintain a specific MRL for the Esfenvalerate/Cherry, Tart combination, but maintain an MRL for their "Fruit, Stone, Group 12" and "Stone fruit" group. Canada does not report a specific MRL but maintains a "general MRL" unless a specific MRL has been established. Mexico follows the US MRL and Korea the CODEX MRL
11. The US and Australia do not maintain a specific MRL for the Imidacloprid/Cherry, Tart combination, but maintain an MRL for their "Fruit, Stone, Group 12" and "Stone fruit" group. Mexico follows the US MRL. Korea follows the Codex MRL.
12. The US and Australia do not maintain a specific MRL for the Lambda Cyhalothrin/Cherry, Tart combination, but maintain an MRL for their "Fruit, Stone, Group 12" and "Stone fruit" group. Canada does not report a specific MRL but maintains a "general MRL" unless a specific MRL has been established. Mexico follows the US MRL.
13. Codex does not maintain a specific MRL for the Permethrin/Cherry, Tart combination, but does maintain an MRL for "Stone fruits" group. The EU indicates the lower limit of analytical determination. Canada does not report a specific MRL but maintains a "general MRL" unless a specific MRL has been established. Mexico follows the US MRL.
14. Australia does not maintain a specific MRL for the Phosmet/Cherry, Tart combination, but does maintain an MRL for "Stone fruits" group
15. The US does not maintain a specific MRL for the Thiamethoxam/Cherry, Tart combination, but does maintain an MRL for "Fruit, Stone, Group 12" group. Canada maintains for its "All food crops" group. Mexico follows the US MRL.
16. The US and Codex do not maintain a specific MRL for the Boscalid/Cherry, Tart combination, but maintain an MRL for their "Fruit, Stone, Group 12" and "Stone fruits" group. Mexico follows the US MRL and Korea the CODEX
17. Australia does not maintain a specific MRL for the Captan/Cherry, Tart combination, but maintain an MRL for "Stone fruits" group. Mexico uses the US MRL
18. Mexico follows the US MRL for Chlorothalonil
19. Australia does not maintain a specific MRL for the Dodine/Cherry, Tart combination, but does maintain an MRL for its "Stone fruits" group.
20. Mexico follows the US MRL for Fenbuconazole
21. Codex does not maintain a specific MRL for the Myclobutanil/Cherry, Tart combination, but does maintain an MRL its "Stone fruits" group. Mexico follows the US MRL
22. The US and Australia do not maintain a specific MRL for the Propiconazole/Cherry, Tart combination, but maintain an MRL for their "Fruit, Stone, Group 12" and "Stone fruit" group. Mexico follows the US MRL.
23. The US and CODEX do not maintain a specific MRL for the Pyraclostrobin/Cherry, Tart combination, but does maintain an MRL for their "Fruit, Stone, Group 12" and "Stone fruits" group. Mexico follows the US MRL and Korea the CODEX MRL.
24. Mexico follows the US MRL for Tebuconazole and Korea follows the CODEX MRL.

25. Australia does not maintain a specific MRL for the Thiophanate-methyl/Cherry, Tart combination, but does maintain an MRL for its "Stone fruits" group. Mexico follows the US MRL
26. The US and CODEX do not maintain a specific MRL for the Trifloxystrobin/Cherry, Tart combination, but maintain an MRL for their "Fruit, Stone, Group 12" and "Stone fruits" group. Canada does not report a specific MRL but maintains a "general MRL" unless a specific MRL has been established. Mexico follows the US MRL and Korea de CODEX MRL.
27. Australia does not maintain a specific MRL for the Ziram/Cherry, Tart combination, but does maintain an MRL for its "Stone fruits" group. The Japanese web page states the following "MRLs for dithiocarbamate are established for the sum of residues of zineb, ziram, thiram, nickel bis (dimethyl dithiocarbamate), ferbam, propineb, polycarbamate, mancozeb, maneb, and metiram, which are individually calculated as carbon disulfide". Mexico follows the US MRL.
28. Mexico follows the US MRL for Ethephon and Korea the CODEX
29. Mexico follows the US MRL for Spirodiclofen and Korea the CODEX

4.3 Blueberries

Chemical Ingredient	Country, Region, Organization					
	US	CODEX	EU	Canada	Japan	Australia
----- (PPM) -----						
Diuron 1	0.1		0.05	0.1	0.05	0.5
Glyphosate iso. Salt 2	0.2		0.1	0.1	0.2	0.05
Hexazinone 3	0.6			0.1	0.2	
Norflurazon 4	0.2			0.1	0.2	
Paraquat 5	0.05	0.01	0.02	0.1	0.05	0.05
Simazine 6	0.2		0.1	0.1	0.2	0.1
Terbacil 7	0.2			0.1	0.1	
Insecticides						
Azinphos-methyl 8	5	5	0.05	2	5	1
Carbaryl 9	3		0.05	7	7	7
Esfenvalerate ¹⁰	1		0.02	0.1	1	1
Chemical Ingredient	Country, Region, Organization					
US	CODEX	EU	Canada	Japan	Australia	
----- (PPM) -----						
Imidacloprid ¹¹	3.5	5	0.05	1	3	
Malathion ¹²	8	10	0.02	8	0.5	0.5
Methomyl ¹³	6		0.05	6	1	2
Phosmet	10	10	10	5	10	
Tebufozide ¹⁴	3	3	3	1	3	2
Fungicides						
Azoxystrobin ¹⁵	3		0.05	0.1	3	
Boscalid ¹⁶	13	10	10	3.5	3.5	
Captan ¹⁷	20	20	0.02	5	20	20
Chlorothalonil ¹⁸	1		0.01	0.6	1	10

Fenbuconazole ¹⁹	0.3		1	0.1	0.3	
Fosetyl-al ²⁰	40		2	40	70	
Pyraclostrobin ²¹	4	1	0.5	3.5	1.3	
Thiophanate-methyl ²²	1.5		0.1	0.1	3	5
Ziram ²³	7		0.1	7	5	10

1. The US, The EU and Australia do not maintain a specific MRL for the Diuron/Blueberry combination, but maintain an MRL for "Berry, Group 13", "Berries and small fruit" and "Fruit" groups. The EU MRL indicates lower limit of analytical determination. Canada does not report a specific MRL for the Diuron/Blueberry/Berry combination but maintains a "general MRL" unless a specific MRL has been established.
2. The US, the EU and Australia do not maintain a specific MRL for the Glyphosate/Blueberry combination, but maintain an MRL for "Berry, Group 13" group and "Berries and small fruit" group. The EU MRL indicates lower limit of analytical determination. Australia set an MRL "at or about" the limit of analytical quantitation. Canada does not report a specific MRL for the Glyphosate/Blueberry/Berry combination but maintains a "general MRL" unless a specific MRL has been established.
3. Canada does not report a specific MRL for the Hexazinone/Blueberry/Berry combination but maintains a "general MRL" unless a specific MRL has been established
4. Canada does not report a specific MRL for the Norflurazon/Blueberry/Berry combination but maintains a "general MRL" unless a specific MRL has been established
5. The US, the EU, CODEX and Australia do not maintain a specific MRL for the Paraquat dichloride/Blueberry combination, but maintain an MRL for "Berry, Group 13", "Berries and other small fruits" and "Fruit Fresh or Frozen; Nuts" and "Fruits" group. The EU MRL indicates lower limit of analytical determination. Australia set an MRL "at or about" the limit of analytical quantitation. Canada does not report a specific MRL for the Paraquat/Blueberry/Berry combination but maintains a "general MRL" unless a specific MRL has been established.
6. Australia and Canada does not report a specific MRL for the Simazine/Blueberry/Berry combination. Australia maintains an MRL "at or about" the limit of analytical quantitation for Fruits and Canada maintains a "general MRL" unless a specific MRL has been established
7. Canada does not report a specific MRL for the Terbacil/Blueberry/Berry combination but maintains a "general MRL" unless a specific MRL has been established
8. Azimphos-methyl will be deregistered in the U.S. in September 30, 2012. The EU MRL indicates lower limit of analytical determination
9. The US does not maintain a specific MRL for the Carbaryl/Blueberry combination, but maintains an MRL for its "Bushberry subgroup 13". The EU MRL indicates lower limit of analytical determination
10. The EU does not maintain a specific MRL for the Esfenvalerate/Blueberry combination, but maintains an MRL for "Other small fruits". Japan and Australia do not maintain a specific MRL for Esfenvalerate but maintain an MRL for fenvalerate which includes this ingredient.

Australia reports MRL for Strawberries. Canada does not report a specific MRL for the Esfenvalerate compound but maintains a "general MRL" when a specific MRL has not been established

11. Codex does not maintain a specific MRL for the Imidacloprid/Blueberry combination, but does maintain an MRL for "Berries and other small fruits" group. The EU MRL indicates lower limit of analytical determination
12. The EU Malathion MRL indicates lower limit of analytical determination
13. The EU Methomyl MRL indicates lower limit of analytical determination
14. The US does not maintain a specific MRL for the Tebufenozide/Blueberry combination, but does maintain an MRL its "Berry, Group 13" group. Canada does not maintain a specific MRL for Tebufenozide/Blueberries but maintains an MRL for cranberries which are in the group 13-07: Berry and Small Fruit Crop Group, in which blueberries are also classified. Australia reports that the MRL residue definition or use is temporary to enable further experimental work to be carried out in Australia or overseas, and will be reconsidered at some future date, or the product will be phased out.
15. The US does not maintain a specific MRL for the Azoxystrobin/Blueberry combination, but maintain an MRL for "Bushberry, Subgroup 13B". The EU MRL indicates lower limit of analytical determination. Canada does not report a specific MRL for Azoxystrobin/Blueberry combination but maintains a "general MRL" for specific MRL that has not been established
16. The US and Codex do not maintain a specific MRL for the Boscalid/Blueberry combination, but maintain an MRL for "Bushberry, Subgroup 13B" and "Other small fruit and berries" group.
17. The EU Captan MRL indicates lower limit of analytical determination
18. The EU Chlorothalonil indicates lower limit of analytical determination. Australia does not maintain a specific MRL for the Chlorothalonil/Blueberry combination, but maintains an MRL for Berries and other small fruits. Australia reports that the MRL residue definition or use is temporary to enable further experimental work to be carried out in Australia or overseas, and will be reconsidered at some future date, or the product will be phased out.
19. Canada does not report a specific MRL for Fenbuconazole but maintains a "general MRL" for crops without specific MRL established
20. The US does not maintain a specific MRL for the Fosetyl-Al/Blueberry combination, but maintains an MRL for "Bushberry, Subgroup 13B". The EU MRL indicates lower limit of analytical determination
21. The US does not maintain a specific MRL for the Pyraclostrobin/Blueberry combination, but does maintain an MRL for "Berry, Group 13" group.
22. The US information for Thiophanate-methyl is available at EPA <http://www.epa.gov/EPA-PEST/2002/September/Day-12/p23266.htm>; The EU Thiophanate-methyl MRL indicates lower limit of analytical determination. Canada does not report a specific MRL for Thiophanate-methyl but maintains a "general MRL" for crops without a specific MRL established. Australia reports MRL for "berries and other small fruits" group. Codex reports no MRLs established or prior MRLs revoked
23. Australia does not maintain a specific MRL for the Ziram/Blueberry combination, but maintains an MRL for "Berries and small fruit" group. Australia reports that the MRL residue definition or use is temporary to enable further experimental work to be carried out in Australia

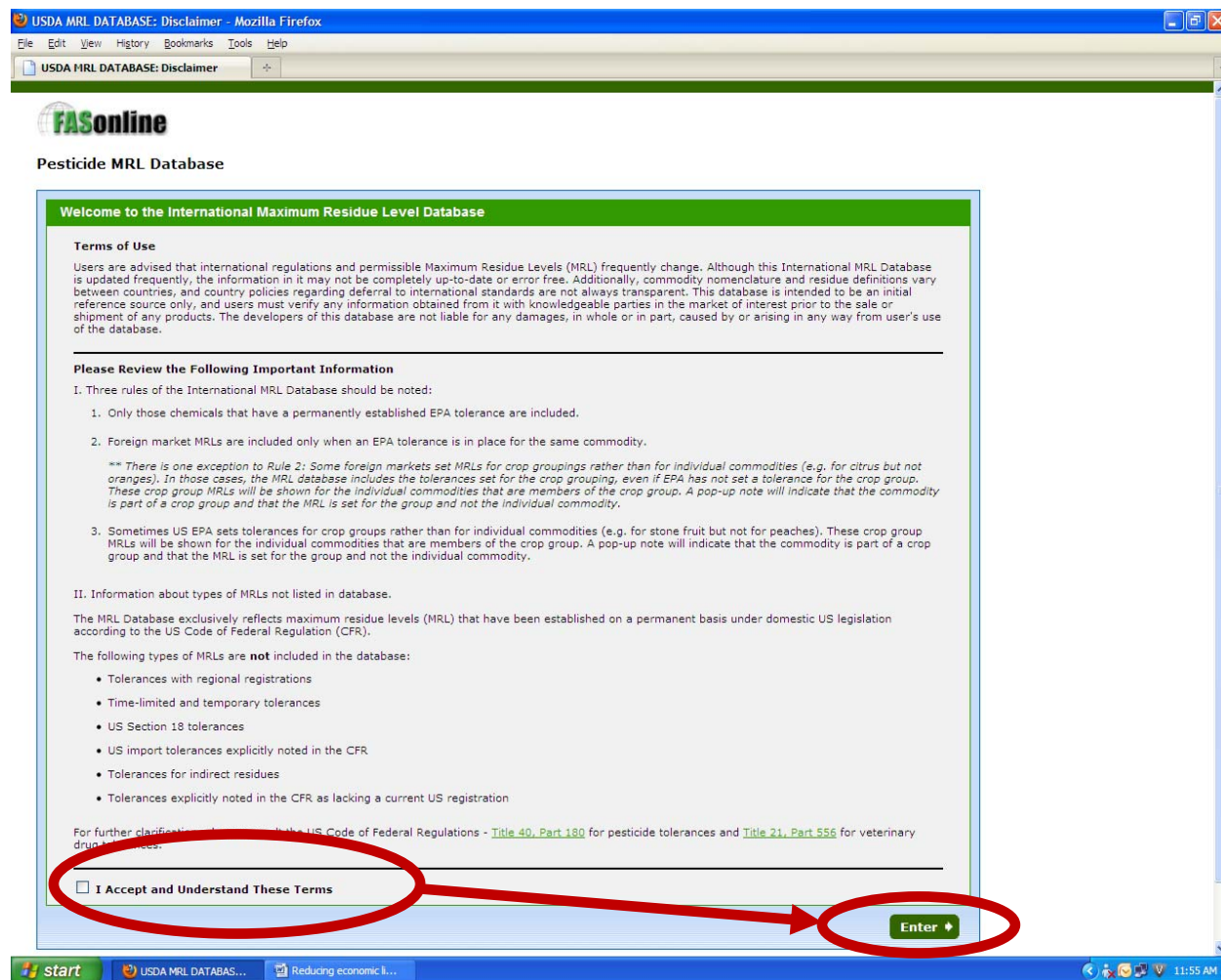
or overseas, and will be reconsidered at some future date, or the product will be phased out. The Japanese page does not have a MRL for this ingredient it has the following "MRLs for dithiocarbamate are established for the sum of residues of zineb, ziram, thiram, nickel bis (dimethyl dithiocarbamate), ferbam, propineb, polycarbamate, mancozeb, maneb, and metiram, which are individually calculated as carbon disulfide". The EU Ziram MRL indicates lower limit of analytical determination

5. Online information about MRLs

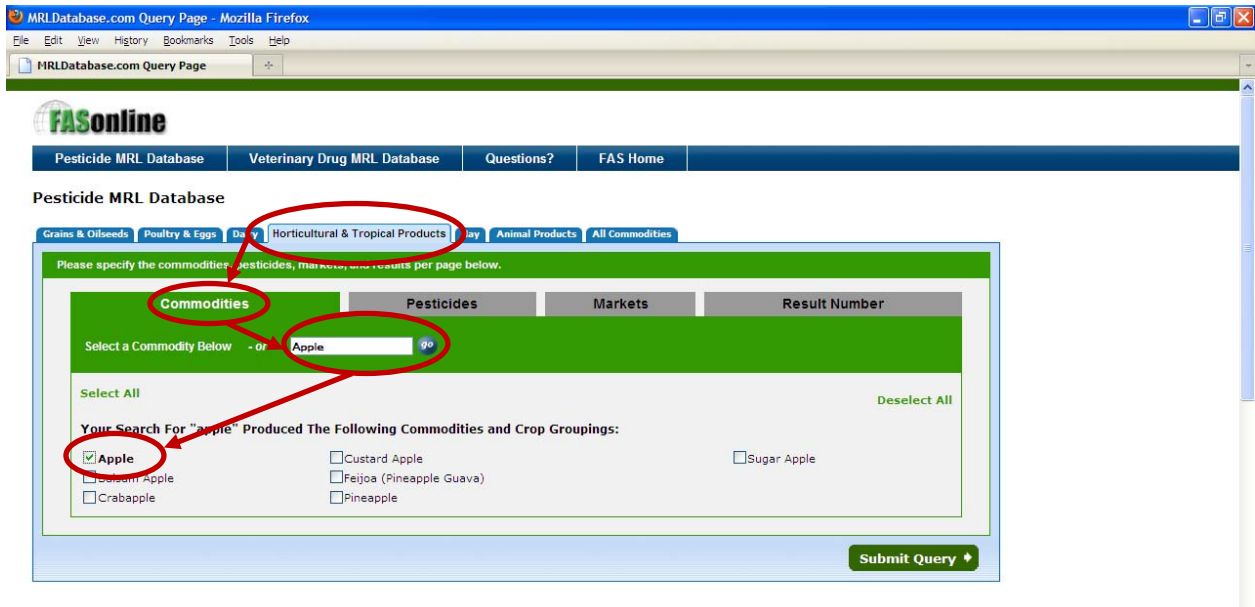
Finding information about specific MRL regulations is a process that requires time and patience. While MRL information is available online for some countries, this information must be checked again with the corresponding authority in the country of destination before exporting any products. The following section shows examples of how to find information about MRLs from the following online sources: FAS, CODEX, and the EU.

5.1 FAS web page

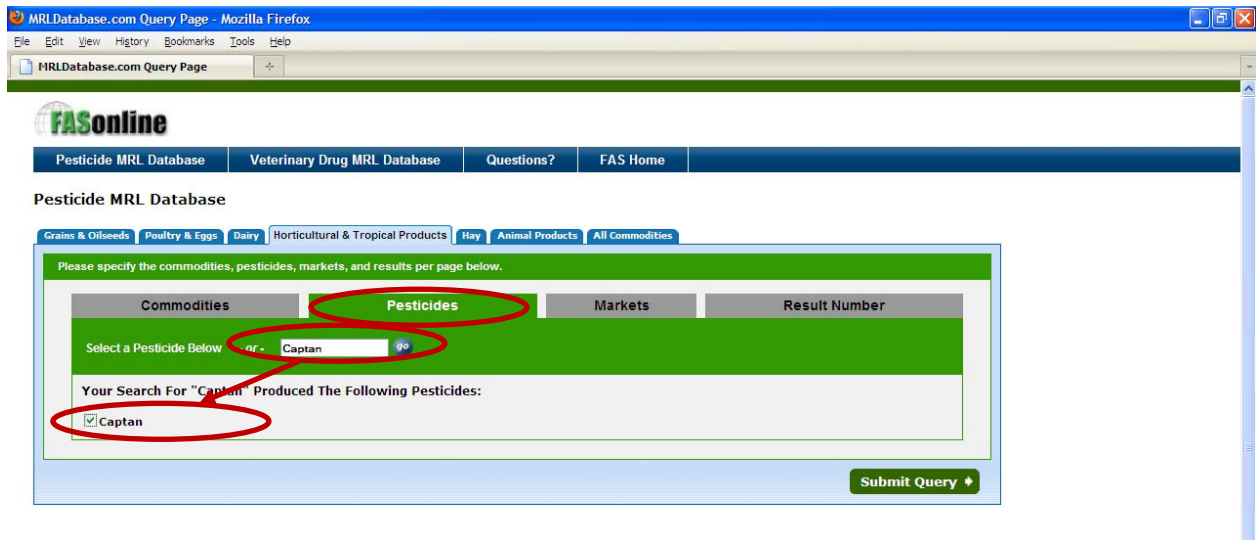
- 1) Go to <http://www.mrldatabase.com/>
- 2) The disclaimer page will appear. After reading the disclaimer, check the “I Accept and Understand These Terms” box
- 3) After checking the box, click enter



- 4) You will enter the “Pesticide MRL Database” page.
- 5) On this page, select the “Horticultural and Tropical products” tab
- 6) Click on the tab “Commodities”.
- 7) There are different ways to look for a specific commodity. In this example, type the commodity you are looking for (e.g., apple) on the search box, and then click “go”. Different products with the word “apple” will appear as options.
- 8) Check the box next to “Apple”



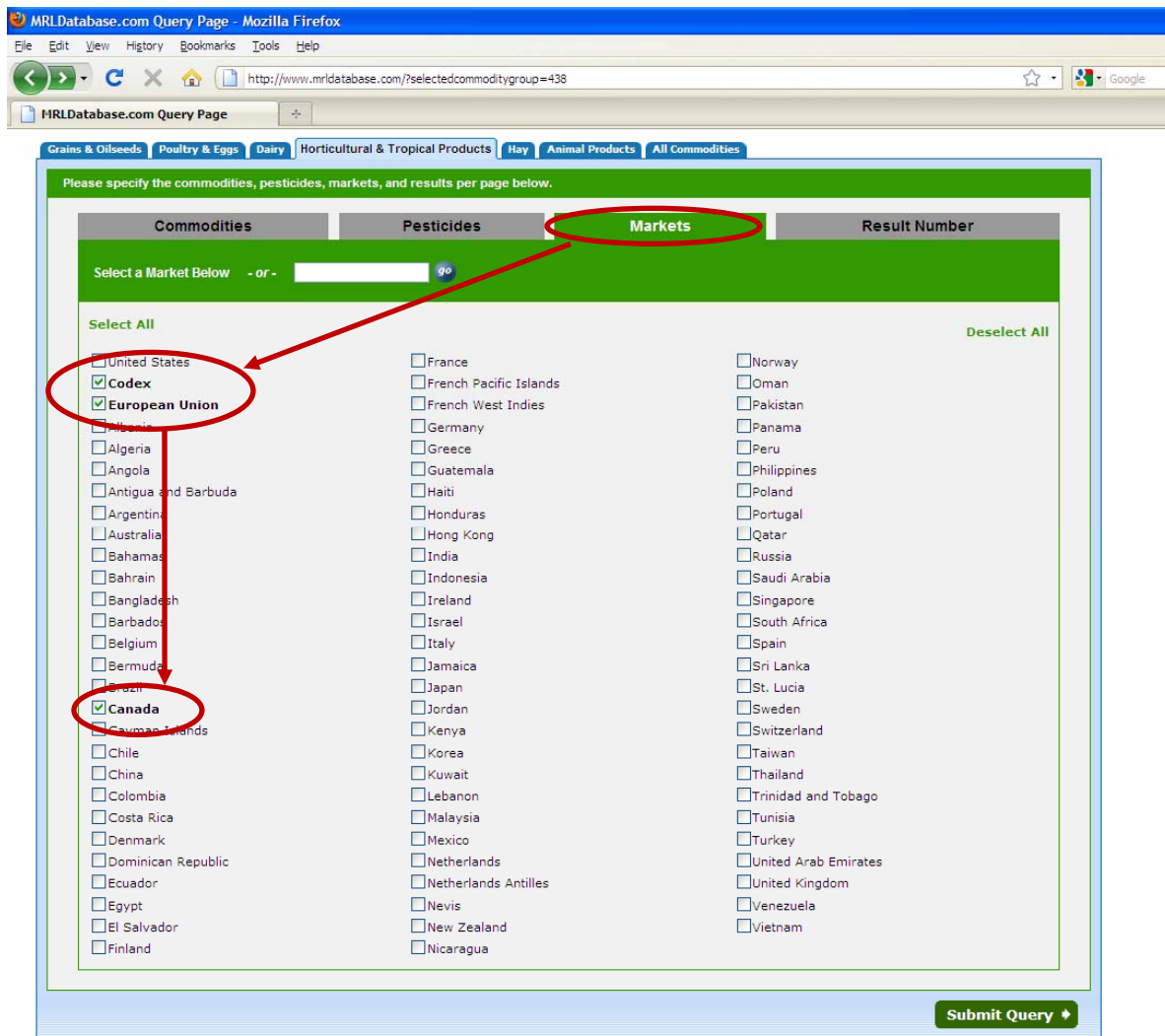
- 9) Next, select the “Pesticide” tab.
- 10) Go to the search box and type the chemical name of a pesticide (e.g., Captan). You can also select pesticides by selecting from the list provided on your screen or by “selecting all” the pesticides. If you select these two options you can get all the information available at the same time
- 11) Click on “go”
- 12) Click on the box next to Captan.



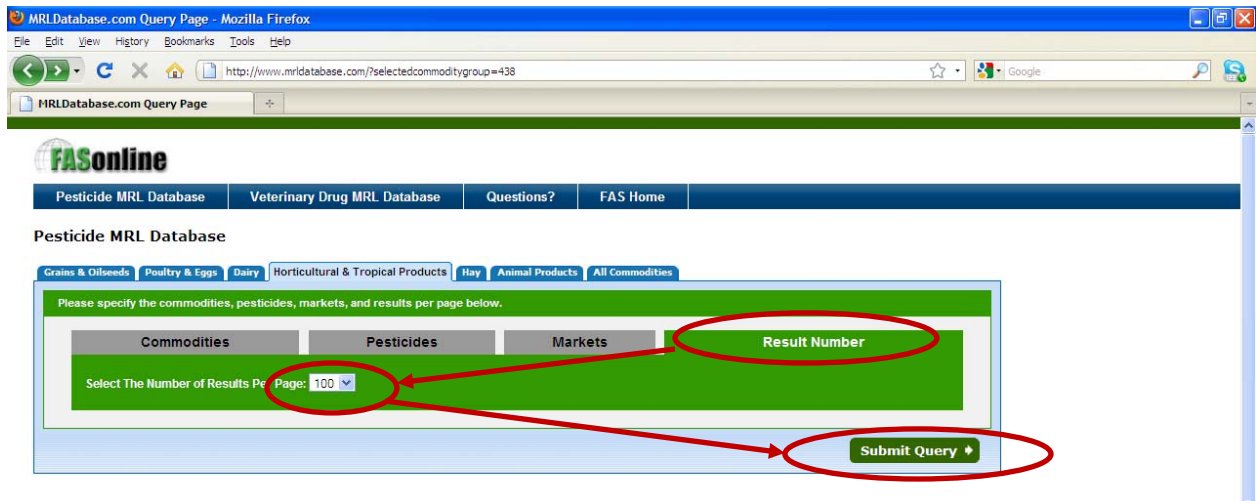
13) Next, select the “Markets” tab.

14) Similar to the Pesticides and Commodities pages, you can also select a market or markets by selecting from the list provided on the screen or by “selecting all” the markets for which information is available.

15) Click on box next to the markets of interest (e.g., CODEX, European Union, Canada)

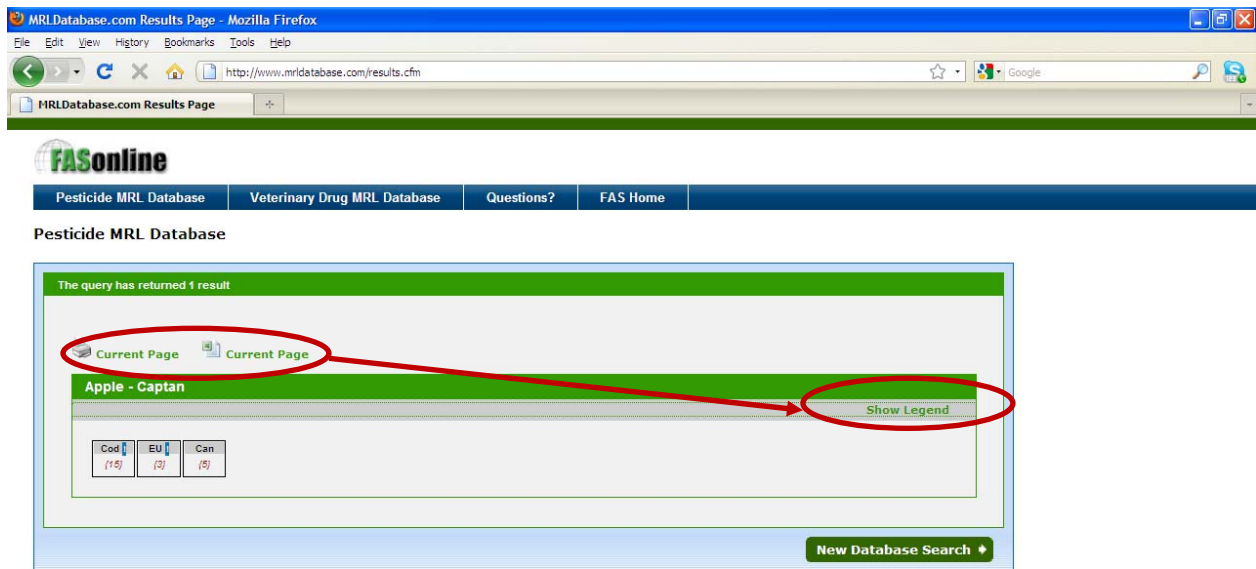


- 16) Click on the “Result Number” tab. You can select to display from 100 to 250 results per page
- 17) Click on the number you want to receive per page (e.g., 100)
- 18) Click on “Submit Query”



14) After submitting the query you will see the result page. This page gives you options to print results or to download it to an Excel spreadsheet.

15) On the right hand side of the panel there is an option to show or hide legends. This option will allow you to understand the meaning of numbers in brackets or numbers in red font.



5.2 The CODEX web page

- 1) Go to http://www.codexalimentarius.net/web/index_en.jsp#
- 2) Select “Official Standards”

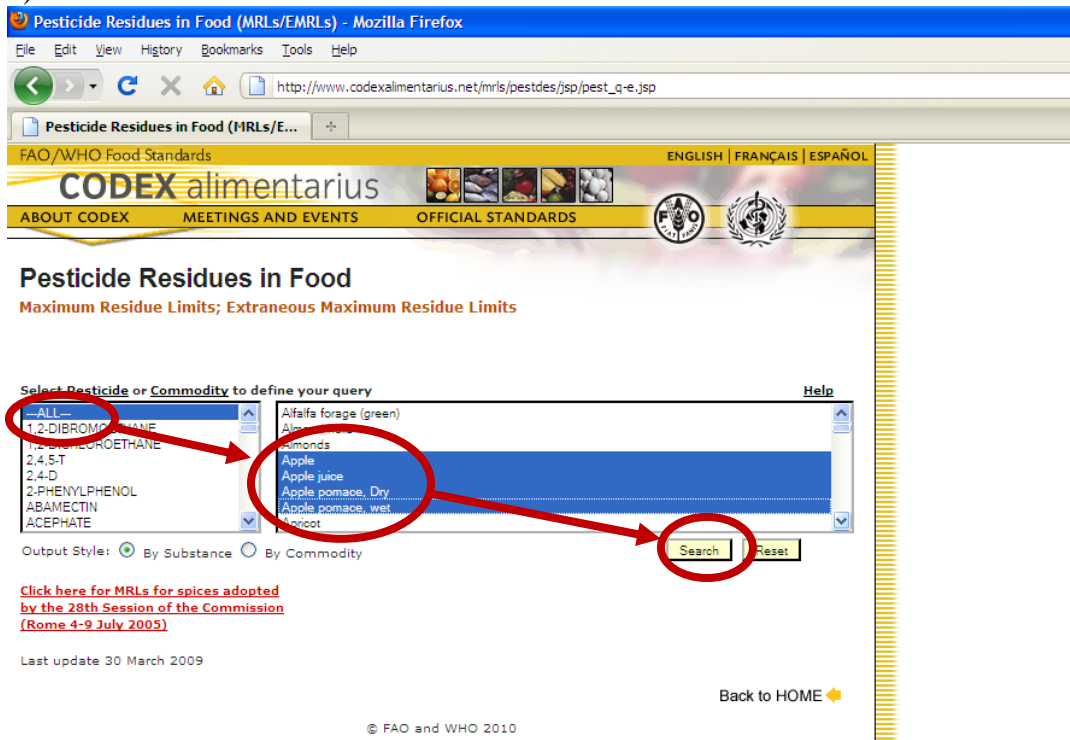


The screenshot shows the Codex Alimentarius website in a Mozilla Firefox browser. The browser's address bar displays the URL http://www.codexalimentarius.net/web/index_en.jsp#. The website header includes the text "FAO/WHO Food Standards" and "CODEX alimentarius" with logos for FAO and WHO. A navigation menu contains "ABOUT CODEX", "MEETINGS AND EVENTS", and "OFFICIAL STANDARDS", with the latter being circled in red. Below the header is a "Welcome" message and a paragraph describing the Codex Alimentarius Commission's mission. A "NEWS" section lists several updates, including the Codex Alimentarius Newsletter, the 19th edition of the Procedural Manual, and new special publications. A "RELATED CODEX LINKS" section lists various international organizations and Codex programs. An "EXTERNAL LINKS" section lists WTO, OIE, IPPC, IPFSAPH, and STDF. A warning message at the bottom states that this is the only official website. A footer contains a copyright notice for 2010 and a logo for Adobe Acrobat Reader.

- 3) Next, select “Pesticides MRLs”



- 4) You will be redirected to the page where you could search for the pesticides of your interest
- 5) In the Pesticide Residues in Food page, on the left-hand-side column, look for the chemical name of the pesticides of your interest or select “ALL”.
- 6) On the right-hand-side column, select the products of interest (e.g. apples). You can select several products using Ctrl + click.
- 7) Then click “Search”



- 8) You will get the results for all the chemicals recorded by CODEX which are used in apples

Pesticide Residues in Food (MRLs/EMRLs) - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://www.codexalimentarius.net/mris/Servlet/PesticideServlet?Pesticides=0&Items=184&Items=216&Items=62&Items=

Pesticide Residues in Food (MRLs/E...

FAO/WHO Food Standards ENGLISH | FRANÇAIS | ESPAÑOL

CODEX alimentarius

ABOUT CODEX MEETINGS AND EVENTS OFFICIAL STANDARDS

Pesticide Residues in Food
 Maximum Residue Limits; Extraneous Maximum Residue Limits

44 Records

ABAMECTIN (used also as veterinary drug)			
Commodity	MRL (mg/kg)	Symbols	Footnote
Apple	0.02		
AZINPHOS-METHYL			
Commodity	MRL (mg/kg)	Symbols	Footnote
Apple	2		
AZOCYCLOTIN			
Commodity	MRL (mg/kg)	Symbols	Footnote
Apple	0.2		
BOSCALID			
Commodity	MRL (mg/kg)	Symbols	Footnote
Apple	2		
CAPTAN			

9) If you scroll down the screen you will see an option to download the list in CSV format and also CODEX contact information

Commodity	MRL (undef)	Symbols	Footnote
Apple	0.5		
METHIDATHION			
Commodity	MRL (mg/kg)	Symbols	Footnote
Apple	0.5		
METHOXYFENOZIDE			
Commodity	MRL (undef)	Symbols	Footnote
Apple pomace, Dry	7		
NOVALURON			
Commodity	MRL (undef)	Symbols	Footnote
Apple pomace, Dry	40		
PARATHION-METHYL			
Commodity	MRL (mg/kg)	Symbols	Footnote
Apple	0.2		
PERMETHRIN			
Commodity	MRL (mg/kg)	Symbols	Footnote
Apple pomace, Dry	50		
PHOSMET			
Commodity	MRL (undef)	Symbols	Footnote
Apple	10		
PROPARGITE			
Commodity	MRL (mg/kg)	Symbols	Footnote
Apple	3		
Apple juice	0.2		
PYRACLOSTROBIN			
Commodity	MRL (undef)	Symbols	Footnote
Apple	0.5		
PYRIMETHANIL			
Commodity	MRL (mg/kg)	Symbols	Footnote
Apple pomace, Dry	40		
SPINOSAD			
Commodity	MRL (undef)	Symbols	Footnote
Apple	0.1		
TRIADIMEFON			
Commodity	MRL (undef)	Symbols	Footnote
Apple	3		Based on triadimenol use only
TRIADIMENOL			
Commodity	MRL (undef)	Symbols	Footnote
Apple	0.3		Based on triadimenol use only
TRIFORINE			
Commodity	MRL (mg/kg)	Symbols	Footnote
Apple	2		

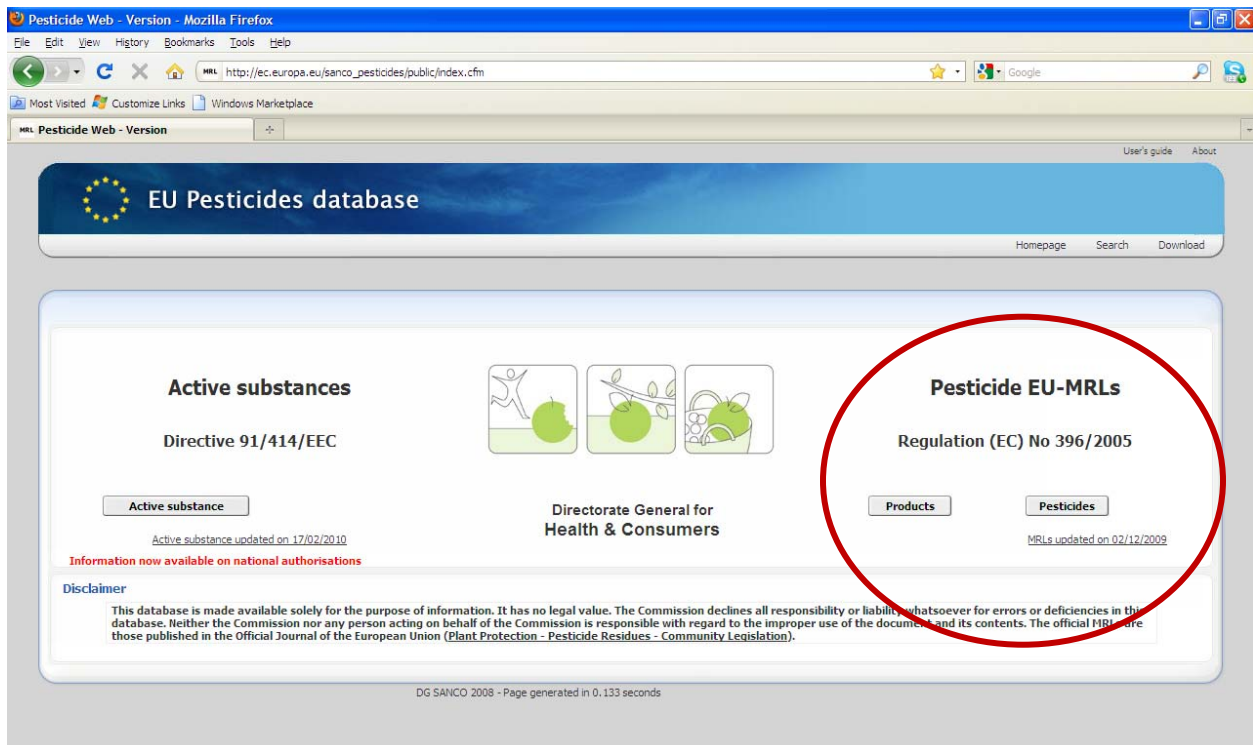
Click on the file to download it as .CSV

[CSV File](#) (Size <1K)

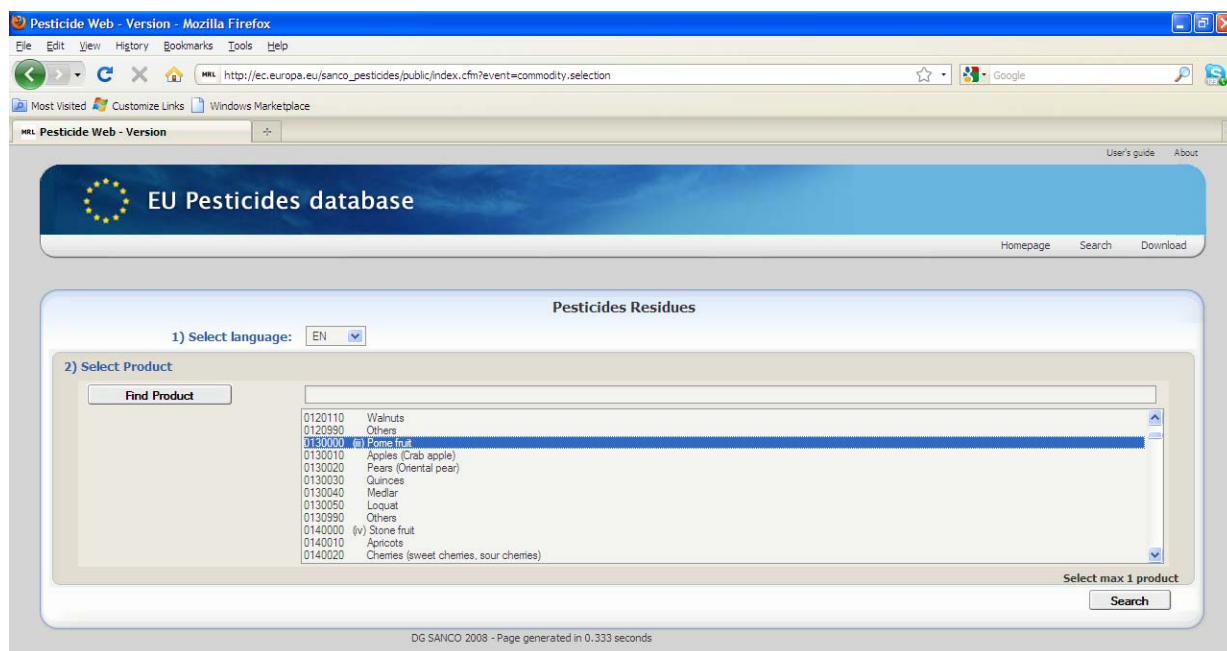
For any further information please refer to:
 Secretariat of the Codex Alimentarius Commission
 Viale delle Terme di Caracalla, 00100, Rome, Italy
 Tel: +39(06)5705.1
 Fax: +39(06)5705.4593
 Email: Codex@fao.org

5.3 The EU web page

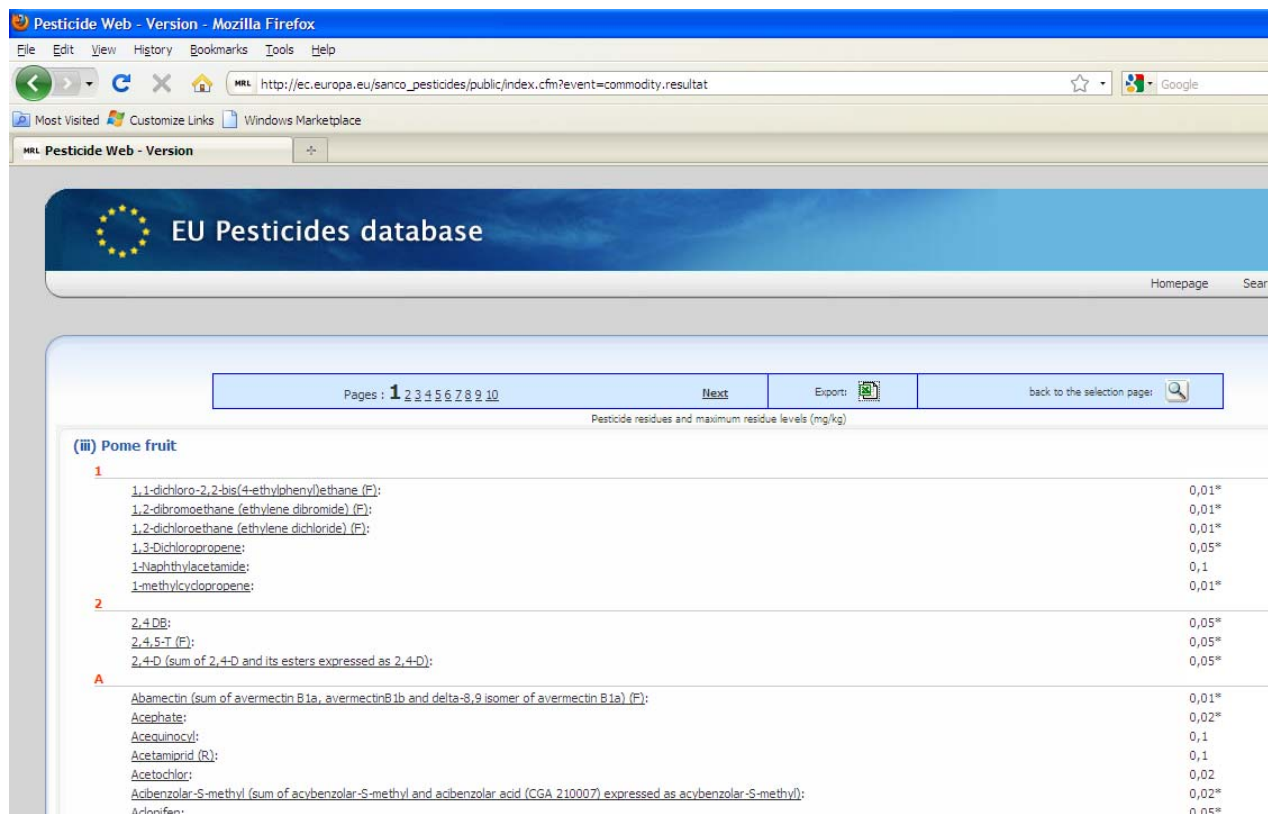
- 1) Go to http://ec.europa.eu/sanco_pesticides/public/index.cfm
- 2) You will enter the EU pesticide database. On the right-hand side of your screen you will see the Pesticide EU-MRLs section. Click either “Products” (if you wish to find information by products) or “Pesticides” (if you want to enter the chemical name of the pesticide you are looking for)



- 3) Click on “Products”
- 4) You will enter the pesticide residue page. In this page you can select the language you prefer.
- 5) Click on the product of interest (e.g. pome fruit) from the list provided on this page. You could also enter the name of the product in the search area above the list of products. You can only search for one product at a time.
- 6) After the selection is made, click search



7) You will see the result page with all the pesticides the EU reports for your selection in alphabetical order. You have the option to download this information



6. Appendix

6.1 List of Acronyms

Acronym	Name
MRL	Maximum Residue Limit
APVMA	Australian Pesticides and Veterinary Medicines Authority
HC	Health Canada
EFSA	European Food Safety Authority
EU	European Union
JMHLW	Japan Ministry of Health, Labor and Welfare
KFDA	Korea Food and Drug Administration
CODEX	The Codex Alimentarius
EPA	Environmental Protection Agency
FDA	Food and Drug Administration
USDA	U.S. Department of Agriculture
WTO	World Trade Organization
SPS	Sanitary and Phytosanitary
TBT	Technical Barriers to Trade
FAS	Foreign Agricultural Service
CICLOPLAFEST	Inter-ministerial commission Ministries of Commerce, Agriculture, Ecology and Health, Mexico
COFEPRIS	Federal Commission for the Protection against Sanitary Risk
FAO	Food and Agriculture Organization
WHO	World Health Organization
UN	United Nations

7. References

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