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GLOBAL SOLUTIONS

Prepared for the European Crop Protection Association

**Estimation of Potentially Affected Agricultural Imports
Due to Hazard-Based Criteria in the EU Regulation of Plant Protection Products**

EXECUTIVE SUMMARY

October 2017

Note that this analysis provides an estimation of trade flows that could potentially be affected, not a prediction of the likely trade effects. Study limitations, including under- and over-estimation, are discussed in the methodology section. This study was funded by CropLife International and the European Crop Protection Association (ECPA) and relevant active substances were compiled by ECPA from European Commission documents. The analysis and all other data collection is the independent work of Bryant Christie Inc.

As the European Union applies the hazard-based cut-off criteria for active substances used in crop protection products, the possible loss of pesticide Maximum Residue Limits (MRLs) has the potential to adversely affect agricultural imports valued at almost €70 billion in 2016.

This report seeks to broadly identify the universe of worldwide agricultural exports to the European Union (EU) that could be affected by EU hazard-based cut-offs for crop protection active substances.

In 2009, the European Union revised its regulation of crop protection products, adopting a “hazard-based” approach to the approval of active substances under Regulation 1107/2009.¹ This Regulation establishes hazard-based “cut-offs” for certain categories of substances, including carcinogens,

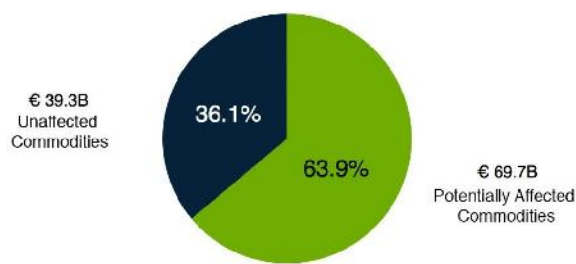
mutagens, or reproductive toxicants (“CMR”), as well as substances that are persistent in the environment. In addition, active substances deemed to have endocrine disrupting properties are subject to a hazard-based cut-off, although EU criteria for identifying substances as endocrine disruptors have not yet been adopted. Under Regulation 1107/2009, active substances meeting the criteria for any of these categories will be cut off from the European market based solely on the health or environment hazard they pose, without a risk assessment that considers levels of exposure.

Regulation 1107/2009 provides that active substances used in crop protection products be assessed for potential hazard each time the substance is subject to an approval or renewal of approval at the EU level. If deemed to belong to one of the cut-off categories, the EU Maximum Residue Levels (MRLs) can be revoked and the substance can be withdrawn from the market. The application of the criteria under regular EU reviews creates the potential for numerous plant protection products to be withdrawn from usage in EU member states and tolerances for residues on imported goods to fall to the default level of 0.01 ppm. Revocation of MRLs would patently have an impact upon worldwide exporters of agricultural products to the European Union, and such trade flow impacts could be substantial.

There are 58 active substances that may be subject to hazard-based evaluation, almost all within the next four years (see Appendix A).

Figure ES-1

Estimated Portion of EU Agricultural Imports That Could be Affected (2016 Value)



The analysis suggests that agricultural imports with a total value of €70 billion in 2016 might be adversely affected by a loss of MRLs resulting from hazard-based non-approval of 58 active substances. This represents over 60 percent of the

¹ Safeners and synergists in crop protection products are also subject to hazard-based analysis.

estimated total value of all agricultural imports to the EU in 2016. Furthermore, although they are outside the scope of this study, it is likely that some processed agricultural products will also be affected.

The potentially affected commodities considered here fall within nine 2-digit Chapters of the Harmonized System (HS) and 82 four-digit HS classifications. However, the potential importance of this issue varies across these product groups, as seen in Figure ES-3.

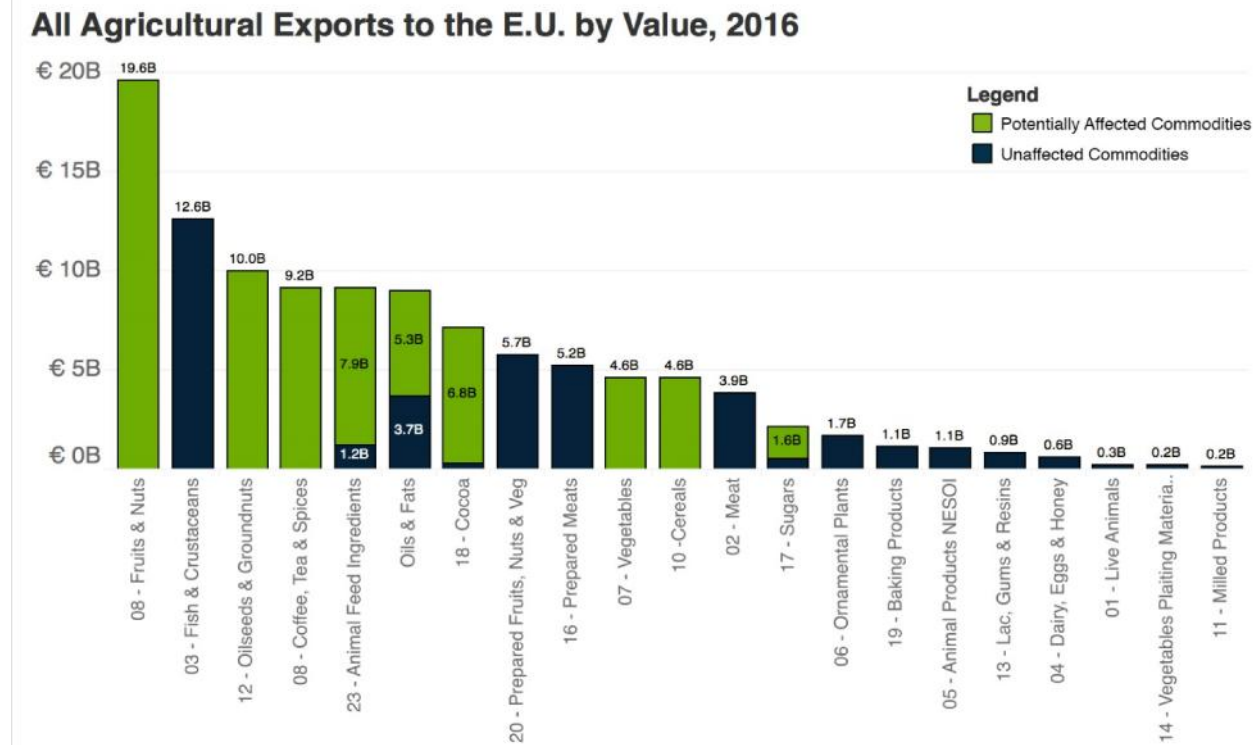
Figure ES-2

European Union 2016 Covered Commodity Imports, Value In Euros



Fruits and nuts comprise over one quarter of the value of potentially affected commodities. Oilseeds and groundnuts account for over 14 percent of the total value and animal feed ingredients, primarily consisting of soybean products, account for an additional 11 percent. Other commodity groups such as cocoa and coffee, tea, and spices are significant both in their possible exposure to the risk of MRL revocation and in their role as leading export goods for less wealthy export countries.

Figure ES-3



The potential impact also varies across trading partners (see Table ES-1, next page). Among the nine world regions examined in this report, the Central and South American region has the greatest exposure to potential trade impacts from hazard-based cut-off criteria under EC Regulation 1107/2009. This region shipped €23.9 billion of the potentially impacted EU imports in 2016 – over one third of the global total value of potentially affected commodities; and almost three quarters of all agricultural products exported to the EU from the region. Brazil accounts for one third of regional export value of potentially affected goods – and is the country with the single largest value of potentially affected commodities, at €8 billion. Fruits and nuts and animal feed ingredients are the two largest relevant product groups (€7 billion and €6 billion, respectively). Also noteworthy are several commodities for which this region is a primary supplier to the European market, adding significance to potential trade disruptions: Brazil supplied

most of the EU's sugar, and the region supplied over half of the coffee, 75 percent of bananas, and 58 percent of the tropical fruits imported into the EU.

Sub-Saharan Africa, too, has significant exports that are at risk of disruption. The total value of potentially impacted commodities from this region is less than half that of Central and South America; however Sub-Saharan Africa has a similarly high proportion of its total agricultural exports that could be impacted (75%). Cocoa is the largest value commodity that could be affected, at €5.8 billion in 2016, and also represents almost 85 percent of the EU's cocoa imports.

Figure ES-4

European Union 2016 Covered Commodity Imports by Region, Value in Euros



Table 1

	Value of All Ag Commodities	Value of Potentially Impacted Commodities	Percent Potentially Impacted
Central and South America	€ 32,616,978,322	€ 23,889,812,620	73.2%
Central Asia	€ 2,162,176,507	€ 1,386,470,839	64.1%
East and South Asia	€ 10,458,832,406	€ 4,349,063,821	41.6%
Europe (Non-E.U./EFTA)	€ 11,197,103,019	€ 7,541,385,305	67.4%
North Africa and Middle East	€ 6,608,484,947	€ 4,300,162,556	65.1%
North America and the Caribbean	€ 14,439,932,137	€ 9,426,205,514	65.3%
Oceania	€ 3,859,804,400	€ 1,914,434,403	49.6%
Southeast Asia	€ 12,894,880,571	€ 5,866,583,594	45.5%
Sub-Saharan Africa	€ 14,820,617,986	€ 11,056,824,841	74.6%
World Total	€ 109,058,810,295	€ 69,730,943,493	63.9%

North America and the Caribbean accounted for 13.5 percent of potentially affected imports into the EU in 2016, and 65 percent of the region's total agricultural exports to the EU could be impacted by hazard-based cut-offs. Two commodity groups – fruits and nuts, and oilseeds and groundnuts – represent the bulk of the region's €9.4 billion export value, at €3.4 billion each. The EU also imported over €1 billion of cereal grains, including 60 percent of total wheat imports.

Southeast Asia supplied the EU with €5.9 billion of commodities in 2016 that are potentially affected by hazard-based cut-off criteria under EC Regulation 1107/2009. Vegetable oils – primarily palm, but also coconut – comprise one third of this total value, and also represent one third of all EU imports of vegetable oils. Coffee exports accounted for fully 25 percent of total regional exports of potentially affected commodities.

European countries outside the EU and EFTA exported €7.5 billion of potentially affected commodities to the EU in 2016. This included €2.5 billion of fruits and nuts, almost one third of which was the value of tree nuts from Turkey. The region also supplied almost half of the EU's total imports of stone fruit (valued at €178 million); and one third of all cereal grain imports (€1.7 billion). Exports of crude sunflower seed oil from Ukraine totaled €989, accounting for 98 percent of EU imports of the commodity and 82 percent of the region's total vegetable oil exports.

East and South Asia supplied the EU with €4.3 billion of potentially affected commodities in 2016, approximately 8.4 percent of the total value. Coffee, tea, and spices were the largest commodity group, with a total export value of €1.2 billion, divided almost evenly among the three named commodities.

North Africa and the Middle East exports of potentially affected agricultural commodities in 2016 totaled €4.3 billion. Seventy five percent comprised exports of fruit and nuts (€1.7 billion) and vegetables (€1.5 billion). Morocco was the primary supplier of both categories, with total potentially affected exports of €1.7 billion.

Oceania's exports of potentially affected commodities totaled only €1.9 billion in 2016. The primary commodity group, oilseeds, was comprised predominantly of rapeseed exports from Australia. Similarly, the second largest commodity group, fruits and nuts, includes primarily strawberries, apples, and pears from New Zealand and nuts from Australia.

The Central Asian region has the smallest value of potentially impacted commodities at just €1.4 billion. Russia alone provides 75 percent of the region's exports to the EU within the covered commodity groups. Half of all relevant exports are comprised of cereals and animal feed ingredients.

Part 1 of this report presents the value of potentially affected trade flows by exporting region and product group. The summary of global results includes a list of all trading partners and the total value of potentially affected commodities from each. Part 2 of the report presents the 2016 values of potentially affected exports for the 50 top exporting countries, and identifies for each the top three product groups that are at risk.