



Project fact sheet (1): Import and use volumes in Costa Rica of HHP candidates for Rotterdam PIC listing

Prepared by IRET and PAN UK for Rotterdam CRC-12, August 2016

Background

The Regional Institute for Research on Toxic Substances (IRET), based at the National University, maintains a pesticide manual database and is mandated to make regular assessments of national pesticide import and export data available from government sources. The analysis tracks volumes of technical material and formulated products imported and trends in the intensity of pesticide use (kg per hectare). Costa Rica formulates a considerable volume of pesticide technical material in-country, some of which is then exported to neighbouring countries in Central America. IRET's analysis for the HHP project will address both imports and exports and will be updated in December 2016 when the latest data becomes available. The HHP project team are also analysing national import data to indicate which qualify as HHPs (according to hazard criteria used in the PAN International HHP List).

For the purposes of informing Rotterdam CRC delegates and other decision makers, this fact sheet summarises preliminary findings in relation to identifying which HHPs are in use in Costa Rica. Table 1 summarises the most recent data available on import volumes of five active ingredients under discussion for PIC listing.

Table 1. Import volumes of selected candidate PIC List pesticides in Costa Rica

Active ingredient	2014 imports	2015 imports	2016 imports (1st trimester only)	Comments
atrazine	19,328	19,580	9,450	Imports remain relatively constant in recent years
carbofuran	19,800	14,400	0	Considerable decrease as carbofuran is being phased out, with all remaining uses to finish in March 2017
carbosulfan	1,313	1,875	0	Imports had ceased in 2012-2013 but resumed in 2014-2015.
paraquat	505,458	459,942	72,616	Large increase in imports (approx. 30%) in 2014 and 2015, compared with previous years (350,000kg in 2012 & 387,000kg in 2013)
trichlorfon	0	0	0	None imported since 1997

Import volumes data relates to the years 2014 to 2016 and are given in kg active ingredient imported per year or part year. Source: summary data from IRET, using Costa Rican government data

Information on current use of candidate PIC list pesticides in coffee production

The SAICM HHP project has surveyed 85 coffee farmers, large and small scale, in different production areas in Costa Rica during 2015-2016, covering an area of 2,941 ha. Use information is given in Table 2. Just over 2% of farmers report using carbofuran, generally at planting stage, for control of nematodes and insect pests which can attack the roots. Until recently some farmers also used it for adult coffee bushes but not in every year. Since the 2014 decision of the Costa Rican government to prohibit carbofuran by 2016, use has dropped as the last date (June 2015) for all uses other than those permitted in pineapple and banana approached.

Table 2. Usage data on candidate PIC list chemicals by Costa Rican coffee farmers

Active ingredient	Average dose by reporting farmers	Weighted average dose on national coffee area
Carbofuran	0.42	0.0008
Carbosulfan	Nd	Nd
Paraquat	0.72	0.04
Atrazine	Nd	Nd
Trichlorfon	Nd	Nd

Use in kg i.a per ha per year. Nd= no data, as use not reported by farmers surveyed. Source: IRET project report on pesticide use surveys (in preparation).

Paraquat is reported in use by 25% of coffee farmers surveyed. It is applied for weed control in coffee groves between one and three times a year. The team has identified a considerable shift away from glyphosate use in smallholder coffee groves, due to grower concerns about phytotoxicity from possible drift onto coffee foliage during poor application by casual hired labourers. Instead, more growers are using paraquat, raising a 'red light' warning for the IRET team as this is likely to hugely increase acute toxicity risk for workers, especially if casual workers are engaged in poor practices.

Candidate PIC list pesticides in pineapple production

Carbofuran has been used in the past as a nematicide. The government's decision in 2014 to prohibit carbofuran use noted that alternatives both chemical and non-chemical exist for nematode control. See project briefing 'Exploring alternatives to HHP nematicides in Costa Rican pineapple'. Despite its current exceptional use approval for snail pests in pineapple, growers surveyed in 2015 did not report using carbofuran. Data on paraquat use in pineapple farms is still being collected. The HHP project is documenting growers' experiences in managing pineapple foliage post-harvest without use of paraquat.

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