



# Rainforest Alliance Requirements for Aerial Fumigation

November 2017

Version 1.1

The Rainforest Alliance works to conserve biodiversity and ensure sustainable livelihoods by transforming land-use practices, business practices, and consumer behavior.

### More information?

For more information about the Rainforest Alliance, visit [www.rainforest-alliance.org](http://www.rainforest-alliance.org) or contact [info@ra.org](mailto:info@ra.org)

### Translation Disclaimer

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## Policy

<b>Issue Date:</b>	<b>Binding date:</b>	<b>Expiration date:</b>	<b>Replaces:</b>
January 5, 2018	November 24, 2017, and retrospectively until July 1.	Until further notice	Version 1.0 of the same document
<b>Developed by:</b>		<b>Approved by:</b>	
Senior Manager, Standards		Director, Global Programs	
<b>Linked to (name of documents):</b>		<b>Reference criterion or clause number:</b>	
Rainforest Alliance Sustainable Agriculture Standard 2017, version 1.2.		<ul style="list-style-type: none"> <li>• Critical criterion 3.5</li> <li>• Terms and definitions section: Rainforest Alliance requirements for aerial fumigation</li> </ul>	
<b>This policy is applicable to:</b>		<b>Type of organizations (if applicable):</b>	
Audited and certified operations.		Farms and group administrators.	
<b>Crops:</b>		<b>Regions:</b>	
All crops.		All regions.	

## 1. Introduction

Rainforest Alliance is a growing network of people who are inspired and committed to working together to achieve our mission of conserving biodiversity and ensuring sustainable livelihoods. For more information about Rainforest Alliance, visit our website: <http://www.rainforest-alliance.org>.

## 2. Policy

Rainforest Alliance authorizes the following, adjusted definition of the requirements for aerial fumigation, in the Terms & Definitions section of the 2017 Rainforest Alliance Sustainable Agriculture Standard.

### **Rainforest Alliance requirements for aerial fumigation:**

- 1) Aerial fumigations are recommended by a competent professional;
- 2) Spray drift next to natural ecosystems and areas of human activity is reduced through non-aerial application zones or vegetative barriers. A six-year plan for establishing and maintaining effective vegetative barriers will be subject to annual verification:
  - a) Minimum distances for aerial fumigation are:
    - i. 30 meters next to public roads<sup>1</sup> and areas with permanent human activity;
    - ii. In the case of rivers<sup>2</sup>, a 15 m non-application zone for aerial fumigation for each river bank;
    - iii. In the case of creeks and streams, a six-year plan for covering these water bodies with vegetation or other effective physical means is developed and implemented;
    - iv. 15 m next to public roads and areas with permanent human activity, only if the active ingredients and other inputs applied by aerial fumigation, do not represent a toxicological risk for humans<sup>3</sup>.

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<sup>1</sup> When available, the interpretation of this term and other terms related to roads will be based on the applicable legal definition.

<sup>2</sup> When available, the interpretation of this term and other terms related to flowing water bodies will be based on the applicable legal definition.

<sup>3</sup> Reference: online database on pesticides and Integrated Pest Management (IPM), an initiative by the **ISEAL IPM Coalition** — [http://www.ipm-coalition.org/overview/human/field\\_toxicity\\_classes\\_combined/human-toxicity-28454](http://www.ipm-coalition.org/overview/human/field_toxicity_classes_combined/human-toxicity-28454). Human toxicity includes acute toxicity, carcinogenic, endocrine disruptors, mutagenic and ingredients with severe effects.

- b) In the case of roads administered by the farm or group administrator, the people that may be affected by the aerial fumigation are identified and warned beforehand, and the access to pesticide application areas is forbidden.
- 3) Aircraft
  - a) Are equipped with Geographic Positioning Systems (GPS) linked to either automatic or manually operated shut-off valves;
  - b) The flight altitude is maximum 5 m above the crop canopy;
  - c) The length of the application boom is at maximum 80% of the aircraft's wingspan;
- 4) Nozzle type and number of drops are calibrated every six months;
- 5) Hoses, nozzles, valves, GPS system and flow meter are subject to periodic mechanical checkups;
- 6) Weather conditions are:
  - a) Wind speeds are less than 10 kilometers per hour (km/h);
  - b) Inversion conditions are avoided;
  - c) The temperature during daylight hours is the lowest possible, according to the region's weather records.
- 7) Each aerial fumigation is documented with an operational report, including:
  - a) Location of the property;
  - b) Type of service performed;
  - c) Treated crop and area (in hectares) with a sketch of the area indicating its boundaries, barriers, roads, power grids, buildings, magnetic north and geographic coordinates (at least one point);
  - d) Pesticide applications, label names of products applied, active ingredient (AI) name, and concentration (volume per liter, mass per kg, or %AI) in each product, quantity of each formulated product applied, and the application dates, location, and land area over which each product is applied, type of application equipment, name of pesticide handlers;
  - e) Flight and application parameters: height of the flight, width of the effective deposition range, temperature range, wind speed and direction; model, prefix, type of used aircraft;
  - f) Date and time of application (beginning and end of application)
  - g) Direction of application ranges (shots); location of the flight track through georeferencing, specifying whether the application was performed with the Differential Global Positioning System (DGPS).