



January 8, 2007

TO: Robert A. Boesch, Pesticides Program Manager 

FROM: Jon Oka, Pesticides Specialist 

SUBJECT: Syngenta Seeds, Inc./Waimea Canyon School Report Summary

Review of the Syngenta Seeds, Inc./Waimea Canyon School pesticide use investigation has been completed and there is no evidence or documentation indicating that Syngenta Seeds, Inc. used pesticides adjacent to Waimea Canyon School in a manner inconsistent with their label directions.

On November 9, 2006, a tank mix of 92 pounds of Intro (Alachlor), 23 pounds of Aatrex Nine-O (Atrazine) and 8.6 pounds of Callisto (Mesotrione) in 720 gallons of water was applied to 24 acres of Syngenta Seeds, Inc. Fields 802.1, 806.1, 808.2 and 800.3. The fields are north to northwest from the school. According to Syngenta Seeds, Inc. application records, application to Field 802.1 (the field closest to school and north of the school) was from 11:00 am to 11:45 am. Records from the Pacific Missile Range indicate that the wind at 10:15 am was west at 7 knots per hour; at 11:15 am was north at 6 knots per hour. On November 14, 2006, swab samples taken from the windows of Waimea Canyon School were analyzed by the Hawaii Department of Agriculture Chemical Analysis Laboratory (CAL) were found to contain the following (analysis did not include Mesotrione):

<u>Sample Number</u>	<u>Alachlor</u>	<u>Atrazine</u>
111406-01-KA-AK (Rm. D101)	Not detected	19.45 ng
111406-03-KA-AK (Rm. F102)	Not detected	21.60 ng.
111406-05-KA-AK (Rm. T201)	Not detected	8.55 ng.
111406-07-KA-AK (Rm. F103)	Not detected	11.40 ng.
(Limits of Detection - Alachlor 0.1 ppb)		
(Limits of Detection - Atrazine 0.1 ppb)		

When analyzed the CAL, the control samples of swab samples were found to contain the following (analysis did not include Mestrione):

<u>Sample Number</u>	<u>Alachlor</u>	<u>Atrazine</u>
111306-01-KA-AK (#1 06-208)	Not detected	5.10 ng
111306-01-KA-AK (#2 06-208b)	Not detected	3.25 ng.
(Limits of Detection - Alachlor 0.1 ppb)		
(Limits of Detection - Atrazine 0.1 ppb)		

Results inconclusive because Atrazine found in Control Samples. Also, the amount of Alachlor in tank mix is 4 times more than Atrazine but was not detected in any sample. Since the mix applied on November 9, 2006 contains 4 times more Alachlor than Atrazine, it is expected that Alachlor would be detected if the November 9, 2006 application is the cause of the odor. Further follow up by inspector and CAL to determine source of Atrazine found in samples.

On October 20, 2006 to November 6, 2006, Syngenta Seeds, Inc. applied the pesticide Eradicane for weed control to fields west of Waimea Canyon School. On November 14, 2006, an

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inspector from the Hawaii collected the swab samples for the windows of Waimea Canyon School. When analyzed by CAL, the following results of analysis were reported:

<u>Sample Number</u>	<u>EPTC (active ingredient in Eradicane)</u>
111406-01-KA-AK (Rm. D101)	Not detected
111406-03-KA-AK (Rm. F102)	Not detected
111406-05-KA-AK (Rm. T201)	Not detected
111406-07-KA-AK (Rm. F103)	Not detected

(Limit of Detection 0.01 ppm)

On November 14, 2006, Syngenta Seeds, Inc. applied the pesticide Touchdown Hi-Tech (EPA Reg. No. 100-1182) to Cleome gynandra (aka Wild Spider plants, Honohina, or Ili'ohu) to Fields 805, 803.3, 803.2 and 803.2. On November 14, 2006, at 9:45 am, Michael Girod of Syngenta Seeds, Inc. called the Hawaii Department of Agriculture and stated he was informed that Waimea Canyon School contacted Kikiaola Land Company about the pesticide application by Syngenta Seeds, Inc. On November 14, 2006, at 10:45 am, Elizabeth Galvez of the Hawaii Department of Health, Hazard Evaluation and Emergency Response (HEER) called the Hawaii Department of Agriculture to inform the inspector that the Waimea Fire Department had responded to a call from Waimea Canyon School. On November 14, 2006, an inspector from the Hawaii Department of Agriculture met with Captain Gordon Tamura from the Waimea Fire Department, Officer David Miyao from the Kauai Police Department, Registrar Leslie Ibara from Waimea Canyon School, Richard Roberts from Kikiaola Land Company, Grant Manning and Michael Girod from Syngenta Seeds, Inc. Michael Girod collected Cleome gynandra plants and Leslie Ibara assisted in asking teachers and students if the odor they smelled was from the Cleome gynandra plants. Opinions differed whether the scent from the weed was the same they previously smelled. Gordon Tamura and the other firemen confirmed that the odor of the weed might be the source of the odor.

On November 16, 2006, an inspector from the Hawaii Department of Agriculture collected leaves from the Cleome gynandra plants from Field 802 and 805. When analyzed by CAL, the following results of analysis were reported:

<u>Sample Number</u>	<u>Glyphosate (Touchdown)</u>	<u>Aminomethyl Phosphonic Acid</u>
111606-01-KA-AK	Not detected	Not detected
111606-02-KA-AK	Not detected	Not detected
111606-03-KA-AK	Not detected	Not detected
111606-04-KA-AK	217 ppm	11.0 ppm
111606-05-KA-AK	255 ppm	11.0 ppm

(Limit of Detection – Glyphosate 0.05 ppm)
(Limit of Detection – Aminomethyl Phosphonic Acid 0.05 ppm)

On November 14, 2006, an inspector from the Hawaii Department of Agriculture collected the swab samples from the windows of Waimea Canyon School rooms. The analyzed by CAL, the following results of analysis were reported:

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<u>Sample Number</u>	<u>Glyphosate</u>	<u>Aminomethyl Phosphonic Acid</u>
111406-02-KA-AK (Rm. D101)	Not detected	Not detected
111406-04-KA-AK (Rm. F102)	Not detected	Not detected
111406-06-KA-AK (Rm. T201)	Not detected	Not detected
111406-08-KA-AK (Control)	Not detected	Not detected

(Limit of Detection – Glyphosate 0.05 ppm)
(Limit of Detection – Aminomethyl Phosphonic Acid 0.05 ppm)

Glyphosate and its breakdown product Aminomethyl Phosphonic Acid were only detected in the treated field. There was no evidence to demonstrate drift

There is insufficient evidence to support a finding that pesticides used by Syngenta Seeds, Inc. subject to this investigation were used in a manner inconsistent with their label directions or violation of the Hawaii Pesticides Law.