SUPPLEMENTARY INFORMATION

Real-Time Particle Monitoring of Pesticide Drift from an Axial Fan Airblast Orchard Sprayer

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Table S1. Conversion factors to estimate PMC from PNC

Parameter	Starting Units	Conversion Factors	Ending Units
PNC	$\dfrac{count}{0.01\ ft^3}$	$\dfrac{100\ 0.01\ ft^3}{ft^3}\ x\ \dfrac{35.3147\ ft^3}{m^3}$	$\dfrac{count}{m^3}$
GM Diameter	$\dfrac{\mu m}{count}$	$\dfrac{m}{10^6\ \mu m}$	$\dfrac{m}{count}$
Density	$\dfrac{g}{cm^3}$	$\dfrac{10^6\ \mu g}{g}\ x\ \dfrac{10^6\ cm^3}{m^3}$	$\dfrac{\mu g}{m^3}$
PNC to PMC	$PNC\left(\dfrac{count}{m^3}\right)$	$\left(\dfrac{m}{count}\right)^3\ x\ \dfrac{\mu g}{m^3}$	$PMC\left(\dfrac{\mu g}{m^3}\right)$

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Table S2a. Number of samples collected above the canopy

Day	Date	Spray Events	Samples per Spray Event	Total Samples
1	6/10/2016	3^1	5	15
2	9/28/2016	4	5	20
3	9/29/2016	4	3^2	12
4	9/30/2016	4	5	20
	Total	15		67

[1]The first spray event was dropped since the wind was not blowing southbound.
[2]Two samplers failed at locations B and D during that spray day.

Table S2b. Number of samples collected below the canopy

Day	Date	Spray Events	Samples per Spray Event	Total Samples
1	6/10/2016	3^1	4^2	12
2	9/28/2016	4	5	20
3	9/29/2016	4	5	20
4	9/30/2016	4	5	20
	Total	15		72

[1]The first spray event was dropped since the wind was not blowing southbound.
[2]One sampler was not placed at locations E due to a protocol modification.

Figure S1. Time series plot comparing one-minute particle mass concentrations (PMC) during AFA sprayer events and control periods for one of our study days (September 30th, 2016).