



# What's Buzzing

- A Newsletter for Mosquito Control Professionals

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## How Much Resmethrin Is There? Operational aerial study in Suffolk County, New York

Scourge® combines the active ingredient resmethrin with the synergist PBO for effective control of adult mosquitoes. Resmethrin is a photolabile pyrethroid, which provides fast knockdown and kill of mosquitoes, exhibits relatively low toxicity to non-target living organisms.

A study on Scourge efficacy and deposition was conducted in Johns Neck Creek and Unchachoque Creek, New York, in cooperation of Suffolk County Mosquito District, University of Stony Brook and USGS in August 2004. Scourge 18-54 neat was applied at 0.6 ounces/acre (0.007 pound a.i./acre), with a droplet size of MMD 27 microns.

**Resmethrin dry deposits study revealed only trace amounts of resmethrin on the ground.**

### Deposition Monitoring Results

Station #	Resmethrin (ug/sq-ft)		PBO (ug/sq-ft)	
	18-Aug-04	25-Aug-04	18-Aug-04	25-Aug-04
010	<0.2	<0.2	1.7	19.5
011	<0.2	<0.2	<0.5	2.7
012	<0.2	1.2	21.7	12.0
013	----	<0.2	----	10.7
015	----	<0.2	----	<0.5
016	<0.2	<0.2	2.4	3.1
017	<0.2	<0.2	<0.5	<0.5
018	<0.2	<0.2	1.0	<0.5
019	----	<0.2	----	0.5
020	<0.2	<0.2	<0.5	<0.5
021	0.9	----	9.3	----
Caged Fish Site	----	<0.2	----	0.7



**Levels of resmethrin in water were undetectable after application.**

### USGS Monitoring Program Results – John's Neck Creek/Unchachoque Creek

August 25<sup>th</sup> – Resmethrin and PBO

Spray time: 1930

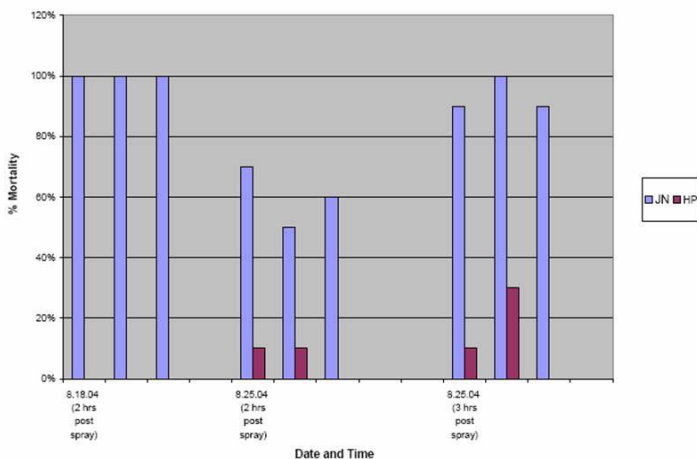
Sample time: Sample Type: Resmethrin (ng/L) PBO (ng/L)

Sample time	Sample Type	Resmethrin (ng/L)	PBO (ng/L)
Pre-Spray	Interface	< 5	< 5
	Point	< 5	< 5
½ hour	Interface	< 5	12
	Point	< 5	15
2 hours	Point	< 5	28
Sunrise	Point	< 5	113
48 hours	Point	< 5	< 5
96 hours	Point	< 5	< 5



**Scourge was highly effective against *Culex pipens*.**

% Mortality Caged Mosquitoes after Resmethrin spray



Data source: [suffolkcountymosquitocontrolplan.com](http://suffolkcountymosquitocontrolplan.com)

