

**Field Simulation on the efficacy of Bti Vectobac WG****Objective:** To determine the penetration of Bti VectoBac WG in field applications.**Date:** 14/04/2015**Time:** 0800-**Sprayer:** Stihl SR 420**Spray Time:** 0903-0928 (25 minutes, with orifice 2 & 3 intermittently, On and off throughout the spray)**Product:** VectoBac WG**Mix Rate:** 125 g in 12 L water (1 caj)**Mosquito:** *Aedes aegypti* (F1050) 10 larvae in 200 ml water**Stage:** L3 (hatched 14**72-hours after Spray Operation (4th days after)\_17 April 2015**

No.	Description (From left to Spray; corner end to main road)	No. Larvae	
			3-h Dead
1	1st house, under the staircase, beside the zinc plate	10	10
2	2nd house, first floor, on the ledge	10	10
3	1st house, in the bushes	10	9
4	2nd house, in the bushes	10	10
5	3rd house (green), under the small table	10	10
6	4th house, outside the house, near to the road	10	10
7	5th house, outside the house, by the side wooden gate	10	10
8	6th house, inside the box at the yard compound	10	10
9	6th house, nearby the window	10	10
10	6th house, in the bushes	10	10
11	7th house, on the staircase	10	10
12	7th house, 1st floor, behind the wall of balcony	10	10
13	8th house (corner lot next to main road), behind the zinc plate	10	9
14	8th house, underneath the wood piece	10	10
15	8th house, on the ground, near to the staircase	10	10
17	8th house, in between the rubbish bins	10	10
18	8th house, in the thick bushes (further in compare to container 16)	10	9
19	8th house, in the thick bushes (further in compare to container 18)	10	10
20	8th house, on the staircase to first floor.	10	10
	<b>Mean</b>		<b>98.</b>
	<b>SD</b>		<b>3.7463</b>
	<b>SE</b>		<b>0.8594</b>

**72-hours after Spray Operation (4th days after)\_17 April 2015****Control**

No.	Description (From left to Spray; corner end to main road)	No. Larvae	
			3-h Dead
1	Control 1	10	0
2	Control 2	10	0
3	Control 3	10	0
	<b>Mean</b>		<b>0.</b>
	<b>SD</b>		<b>0.</b>

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Field Simu

Objective:

Date: 14/0

Sprayer: St

Spray Time

Product: V

Mix Rate: :

4/04/2015)

Mosquito:

Day 7 after

Mortality			No.
our	24-hr		
%	Dead	%	
100.00	10	100.00	1
100.00	10	100.00	2
90.00	10	100.00	3
100.00	10	100.00	4
100.00	10	100.00	5
100.00	10	100.00	6
100.00	10	100.00	7
100.00	10	100.00	8
100.00	10	100.00	9
100.00	10	100.00	10
100.00	10	100.00	11
100.00	10	100.00	12
90.00	10	100.00	13
100.00	10	100.00	14
100.00	10	100.00	15
100.00	10	100.00	17
90.00	10	100.00	18
100.00	10	100.00	19
100.00	10	100.00	20
42	100.00		
43246	0.00		
70085	0.00		

Day 7 after

Control

Mortality			No.
our	24-hr		
%	Dead	%	
0.00	0	0.00	1
0.00	0	0.00	2
0.00	0	0.00	3
00	0.00		
)	0.00		

# ation on the efficacy of Bti Vectobac WG

To determine the penetration of Bti VectoBac WG in field applications.

4/2015

Time: 0800-1000

ihl SR 420

æ: 0903-0928 (25 minutes, with orifice 2 & 3 intermittently, On and off throughout the spray)

ectoBac WG

125 g in 12 L water (1 caj)

*Aedes aegypti* (F1050) 10 larvae in remaining water

Stage: L3 (hatched 17/04/2015)

r Spray Operation\_20th April 2015

Description (From left to Spray; corner end to main road)	No. Larvae	Mort	
		5-hour	
		Dead	%
1st house, under the staircase, beside the zinc plate	10	10	100.00
2nd house, first floor, on the ledge	10	10	100.00
1st house, in the bushes	10	10	100.00
2nd house, in the bushes	10	10	100.00
3rd house (green), under the small table	10	10	100.00
4th house, outside the house, near to the road	10	10	100.00
5th house, outside the house, by the side wooden gate	10	10	100.00
6th house, inside the box at the yard compound	10	10	100.00
6th house, nearby the window	10	10	100.00
6th house, in the bushes	10	10	100.00
7th house, on the staircase	10	10	100.00
7th house, 1st floor, behind the wall of balcony	10	10	100.00
8th house (corner lot next to main road), behind the zinc plate	10	10	100.00
8th house, underneath the wood piece	10	10	100.00
8th house, on the ground, near to the staircase	10	10	100.00
8th house, in between the rubbish bins	10	10	100.00
8th house, in the thick bushes (further in compare to container 16)	10	10	100.00
8th house, in the thick bushes (further in compare to container 18)	10	10	100.00
8th house, on the staircase to first floor.	10	10	100.00
Mean		100.00	
SD		0	
SE		0	

r Spray Operation\_20th April 2015

Description (From left to Spray; corner end to main road)	No. Larvae	Mort	
		5-hour	
		Dead	%
Control 1	10	0	0.00
Control 2	10	0	0.00
Control 3	10	0	0.00
Mean		0.00	
SD		0	

**Field Simulation on the efficacy of Bti Vectobac WG****Objective:** To determine the penetration of Bti VectoBac WG in field applications.**Date:** 14/04/2015**Sprayer:** Stihl SR 420**Spray Time:** 0903-0928 (25 minutes, with orifice 2 & 3 intermittently, On and off the**Product:** VectoBac WG**Mix Rate:** 125 g in 12 L water (1 caj)**Mosquito:** *Aedes aegypti* (F1050) 10 larvae in remaining water**Day 14 after Spray Operation\_27th April 2015**

Day 1 After spray operation\_27th April 2019

Mortality		No.	Description (From left to Spray; corner end to main road)
24-hr			
Dead	%		
10	100.00	1	1st house, under the staircase, beside the zinc plate
10	100.00	2	2nd house, first floor, on the ledge
10	100.00	3	1st house, in the bushes
10	100.00	4	2nd house, in the bushes
10	100.00	5	3rd house (green), under the small table
10	100.00	6	4th house, outside the house, near to the road
10	100.00	7	5th house, outside the house, by the side wooden gate
10	100.00	8	6th house, inside the box at the yard compound
10	100.00	9	6th house, nearby the window
10	100.00	10	6th house, in the bushes
10	100.00	11	7th house, on the staircase
10	100.00	12	7th house, 1st floor, behind the wall of balcony
10	100.00	13	8th house (corner lot next to main road), behind the zinc plate
10	100.00	14	8th house, underneath the wood piece
10	100.00	15	8th house, on the ground, near to the staircase
10	100.00	17	8th house, in between the rubbish bins
10	100.00	18	8th house, in the thick bushes (further in compare to container 16)
10	100.00	19	8th house, in the thick bushes (further in compare to container 18)
10	100.00	20	8th house, on the staircase to first floor.
100.00			Mean
0.00			SD
0.00			SE

**Day 14 after Spray Operation\_27th April 2015****Control**

Mortality		No.	Description (From left to Spray; corner end to main road)
24-hr			
Dead	%		
0	0.00	1	Control 1
0	0.00	2	Control 2
0	0.00	3	Control 3
0.00			Mean
0			SD

Time: 0800-1000

roughout the spray)

Stage: L3 (hatched 24/04/2015)

Field Site

Objective

Date: 14

Sprayer:

Spray Time

Product:

Mix Ratio

Mosquito

Day 21 after

No. Larvae	Mortality				No.
	5-hour		24-hr		
	Dead	%	Dead	%	
10	10	100.00	10	100.00	1
10	10	100.00	10	100.00	2
10	10	100.00	10	100.00	3
10	7	70.00	10	100.00	4
10	10	100.00	10	100.00	5
10	10	100.00	10	100.00	6
10	10	100.00	10	100.00	7
10	10	100.00	10	100.00	8
10	9	90.00	10	100.00	9
10	10	100.00	10	100.00	10
10	9	90.00	10	100.00	11
10	10	100.00	10	100.00	12
10	10	100.00	10	100.00	13
10	10	100.00	10	100.00	14
10	10	100.00	10	100.00	15
10	10	100.00	10	100.00	17
10	10	100.00	10	100.00	18
10	10	100.00	10	100.00	19
10	10	100.00	10	100.00	20
	97.37		100.00		
	7.334928056		0.00		
	1.682747903		0.00		

Day 21 after

Control

No. Larvae	Mortality				No.
	5-hour		24-hr		
	Dead	%	Dead	%	
10	0	0.00	0	0.00	1
10	0	0.00	1	10.00	2
10	0	0.00	0	0.00	3
	0.00		3.33		
	0		5.77		

# **Penetration of Bti Vectobac WG**

**Objective:** To determine the penetration of Bti VectoBac WG in field applications.

**Date:** 04/05/2015

**Time:** 0800-1000

**Equipment:** Stihl SR 420

**Duration:** 0903-0928 (25 minutes, with orifice 2 & 3 intermittently, On and off throughout the spray)

**Material:** VectoBac WG

**Concentration:** 125 g in 12 L water (1 caj)

**Species:** *Aedes aegypti* (F1050) 10 larvae in remaining water

**Stage:** L3 (hatched 01/05/2015)

**Location:** After Spray Operation\_04 May 2015

Description (From left to Spray; corner end to main road)	No. Larvae	Mortality	
		3-hour	
		Dead	%
1st house, under the staircase, beside the zinc plate	10	10	100.00
2nd house, first floor, on the ledge	10	10	100.00
1st house, in the bushes	10	10	100.00
2nd house, in the bushes	10	7	70.00
3rd house (green), under the small table	10	10	100.00
4th house, outside the house, near to the road	10	10	100.00
5th house, outside the house, by the side wooden gate	10	10	100.00
6th house, inside the box at the yard compound	10	10	100.00
6th house, nearby the window	10	9	90.00
6th house, in the bushes	10	10	100.00
7th house, on the staircase	10	9	90.00
7th house, 1st floor, behind the wall of balcony	10	10	100.00
8th house (corner lot next to main road), behind the zinc plate	10	10	100.00
8th house, underneath the wood piece	10	10	100.00
8th house, on the ground, near to the staircase	10	10	100.00
8th house, in between the rubbish bins	10	10	100.00
8th house, in the thick bushes (further in compare to container 16)	10	10	100.00
8th house, in the thick bushes (further in compare to container 18)	10	10	100.00
8th house, on the staircase to first floor.	10	10	100.00
<b>Mean</b>		<b>97.37</b>	
<b>SD</b>		<b>7.334928056</b>	
<b>SE</b>		<b>1.682747903</b>	

**Location:** After Spray Operation\_04 May 2015

Description (From left to Spray; corner end to main road)	No. Larvae	Mortality	
		3-hour	
		Dead	%
Control 1	10	0	0.00
Control 2	10	0	0.00
Control 3	10	0	0.00
<b>Mean</b>		<b>0.00</b>	
<b>SD</b>		<b>0</b>	

### Field Simulation on the efficacy of Bti Vectobac WG

**Objective:** To determine the penetration of Bti VectoBac WG in field applications.

**Date:** 14/04/2015

**Sprayer:** Stihl SR 420

**Spray Time:** 0903-0928 (25 minutes, with orifice 2 & 3 intermittently, On and off the

**Product:** VectoBac WG

**Mix Rate:** 125 g in 12 L water (1 caj)

**Mosquito:** *Aedes aegypti* (F1052) 10 larvae/cup in remaining water + refill another

**Day 28 after Spray Operation\_11 May 2015**

5)

Day 20 after Spray Operation\_11 May 2018

Mortality		No.	Description (From left to Spray; corner end to main road)
24-hr			
Dead	%		
10	100.00	1	1st house, under the staircase, beside the zinc plate
10	100.00	2	2nd house, first floor, on the ledge
10	100.00	3	1st house, in the bushes
10	100.00	4	2nd house, in the bushes
10	100.00	5	3rd house (green), under the small table
10	100.00	6	4th house, outside the house, near to the road
10	100.00	7	5th house, outside the house, by the side wooden gate
10	100.00	8	6th house, inside the box at the yard compound
10	100.00	9	6th house, nearby the window
10	100.00	10	6th house, in the bushes
10	100.00	11	7th house, on the staircase
10	100.00	12	7th house, 1st floor, behind the wall of balcony
10	100.00	13	8th house (corner lot next to main road), behind the zinc plate
10	100.00	14	8th house, underneath the wood piece
10	100.00	15	8th house, on the ground, near to the staircase
10	100.00	17	8th house, in between the rubbish bins
10	100.00	18	8th house, in the thick bushes (further in compare to container 16)
10	100.00	19	8th house, in the thick bushes (further in compare to container 18)
10	100.00	20	8th house, on the staircase to first floor.
100.00			Mean
0.00			SD
0.00			SE

**Day 21 after Spray Operation\_04 May 2015**

**Control**

Mortality		No.	Description (From left to Spray; corner end to main road)
24-hr			
Dead	%		
0	0.00	1	Control 1
0	0.00	2	Control 2
0	0.00	3	Control 3
0.00			Mean
0.00			SD

Time: 0800-1000

roughout the spray)

200 ml water

Stage: L3 (hatched 08/05/2015, 5pm)

No. Larvae	Mortality								
	3-hour		24-hr		48-Hr		72-Hr		96-
	Dead	%	Dead	%	Dead	%	Dead	%	Dead
10	9	90.00	10	100.00	10	100.00	10	100.00	10
10	1	10.00	9	90.00	10	100.00	10	100.00	10
10	1	10.00	9	90.00	9	90.00	10	100.00	10
10	6	60.00	10	100.00	10	100.00	10	100.00	10
10	1	10.00	8	80.00	10	100.00	10	100.00	10
10	3	30.00	10	100.00	10	100.00	10	100.00	10
10	1	10.00	10	100.00	10	100.00	10	100.00	10
10	3	30.00	10	100.00	10	100.00	10	100.00	10
10	10	100.00	10	100.00	10	100.00	10	100.00	10
10	2	20.00	10	100.00	10	100.00	10	100.00	10
10	10	100.00	10	100.00	10	100.00	10	100.00	10
10	3	30.00	10	100.00	10	100.00	10	100.00	10
10	9	90.00	10	100.00	10	100.00	10	100.00	10
10	0	0.00	10	100.00	10	100.00	10	100.00	10
10	2	20.00	10	100.00	10	100.00	10	100.00	10
10	0	0.00	9	90.00	10	100.00	10	100.00	10
10	1	10.00	10	100.00	10	100.00	10	100.00	10
10	0	0.00	8	80.00	8	80.00	9	90.00	10
10	10	100.00	10	100.00	10	100.00	10	100.00	10
	37.89		96.32		98.42		99.47		100
	38.38		6.84		5.01		2.29		0.0
	8.81		1.57		1.15		0.53		0.0

Day 28 after Spray Operation\_11 May 2015

Control

No. Larvae	Mortality				No.	Descriptio	No. Larvae		
	3-hour		24-hr					3-hour	
	Dead	%	Dead	%				Dead	%
10	0	0.00	0	0.00	1	Control 1	10	0	0.00
10	0	0.00	0	0.00	2	Control 2	10	0	0.00
10	0	0.00	0	0.00	3	Control 3	10	0	0.00
	0.00		0.00			Mean		0.00	
	0		0.00			SD		0	



