BRAZILIAN DATA: *UNTREATED* AREA

	***Before* GM Mosquito Release**				***After* GM Mosquito Release**								
Sample No.	**Aug.**	**Sept.**	**Oct.**	**Nov.**	**Dec.**	**Jan.**	**Feb.**	**Mar.**	**Apr.**	**May**	**June**	**July**	**Aug.**
PIR-CON-200	0	0	—	10	8	15	9	12	8	6	3	0	0
PIR-CON-201	0	0	0	11	0	8	13	0	0	0	0	0	0
PIR-CON-202	0	5	9	8	21	12	14	19	9	2	0	0	2
PIR-CON-203	2	0	1	6	11	16	9	0	0	—	4	0	0
PIR-CON-204	0	1	0	8	8	11	18	11	0	0	0	0	—
PIR-CON-205	0	0	8	6	—	0	9	16	11	9	0	2	0
PIR-CON-206	1	2	7	0	6	9	11	9	7	0	0	0	0
PIR-CON-207	0	1	6	9	10	14	16	21	10	0	0	—	0
PIR-CON-208	0	0	3	3	9	7	9	9	—	7	0	0	1
PIR-CON-209	2	4	0	4	12	6	8	15	0	0	0	0	0
L	3	5	6	9									
T	10	10	9	10									
E	5	13	34	65									
OI	30%	50%	67%	90%									
AD	0.50	1.30	3.78	6.50									

For each month column, complete the calculations for the ovitrap index (OI) and the average density (AD) of *Aedes aegypti*, then report the values in the empty gray boxes in the table.

BRAZILIAN DATA: *TREATED* AREA

Sample No.	Before GM Mosquito Impact				After GM Mosquito Impact								
	Aug.	Sept.	Oct.	Nov.	Dec.	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.
PIR-CE-001	0	0	0	10	8	1	0	0	1	0	0	0	0
PIR-CE-002	1	2	1	0	1	0	0	0	0	0	0	0	0
PIR-CE-003	0	7	6	8	6	0	1	0	0	0	0	0	0
PIR-CE-004	0	0	9	6	0	6	0	0	0	0	0	0	0
PIR-CE-005	2	6	5	—	—	—	0	0	0	0	1	0	0
PIR-CE-006	0	1	0	6	1	0	0	0	0	0	0	0	0
PIR-CE-007	2	6	0	—	6	1	0	1	0	0	0	2	1
PIR-CE-008	0	—	11	9	0	0	0	0	0	—	0	0	0
PIR-CE-009	0	2	9	9	9	0	1	—	0	1	0	—	0
PIR-CE-010	1	6	1	11	0	0	0	0	0	0	0	0	0
L	4	7	7	7									
T	10	9	10	8									
E	6	30	42	59									
OI	40%	78%	70%	88%									
AD	0.60	3.33	4.20	7.38									

For each month column, complete the calculations for the ovitrap index (OI) and the average density (AD) of *Aedes aegypti*, then report the values in the empty gray boxes in the table. You will need these numbers to construct your graph.

To compute relative change, calculate the average AD for the untreated and treated areas both before and after the mosquitoes were expected to have an impact (U_b, T_b, U_a, and T_a). For example, the average AD for T_b = (6 + 30 + 42 + 59) eggs/(10 + 9 + 10 + 8) traps = 3.70.

T_b = 3.70 U_b = ____ T_a = ____ U_a = ____ relative change $= \frac{\left(\frac{T_a}{U_a}\right)}{\left(\frac{T_b}{U_b}\right)} - 1 = \frac{(-)}{(-)} - 1 =$ _____

MATING FRACTION DATA: TREATED AREA

	No Detectable Impact								Impact of Releases																	
	Aug.		Sept.		Oct.		Nov.		Dec .		Jan.		Feb.		Mar.		Apr.		May		June		July		Aug.	
Sample No.	**N**	**F**	**N**	**F**	**N**	**F**	**N**	**F**	**N**	**F**	**N**	**F**	**N**	**F**	**N**	**F**	**N**	**F**	**N**	**F**	**N**	**F**	**N**	**F**	**N**	**F**
PIR-CE-001	0	0	0	0	0	0	2	8	0	8	0	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0
PIR-CE-002	1	0	2	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PIR-CE-003	0	0	5	2	3	3	2	6	2	4	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0
PIR-CE-004	0	0	0	0	3	6	5	1	0	0	0	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PIR-CE-005	2	0	4	2	4	1	—	—	—	—	—	—	0	0	0	0	0	0	0	0	0	1	0	0	0	0
PIR-CE-006	0	0	1	0	0	0	6	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
PIR-CE-007	2	0	5	1	0	0	—	—	4	2	1	0	0	0	0	1	0	0	0	0	0	0	0	2	0	1
PIR-CE-008	0	0	—	—	9	2	0	9	0	0	0	0	0	0	0	0	0	0	—	—	0	0	0	0	0	0
PIR-CE-009	0	0	2	0	7	2	6	3	0	9	0	1	1	0	—	—	0	0	0	1	0	0	—	—	0	0
PIR-CE-010	1	0	6	0	0	1	3	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
F		0		5		15		35																		
N	6		25		27		24																			
M	0%		17%		36%		59%																			

Compute the mating fraction by filling in all the empty gray boxes. The GM mating fraction is the calculated as the fraction of fluorescent (F) to nonfluorescent (N) larvae:

$$\text{mating fraction } (M) = \frac{F}{N + F}$$

where *M* equals mating fraction, *F* equals number of fluorescent larvae, and *N* equals number nonfluorescent larvae. To convert the fraction to a percentage, multiply the fraction by 100.