Weekly Report on

JU-DNCC Mosquitoes Surveillance Program

Week 100 (April 24-28, 2026)

Submitted To

Chief Health officer
Dhaka North City Corporation
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Submitted By

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Weekly Report on Mosquitoes Surveillance Program at DNCC

Methods:

In the DNCC (Dhaka North City Corporation) area, mosquito surveillance is conducted across 5 zones. Adult mosquito surveillance involves setting up three types of traps in each zone to capture adult mosquitoes. Simultaneously, larval surveillance entails surveying an area within a 0.5-kilometer radius around traps location to inspect and collect mosquitoes' larvae from potential breeding sites.

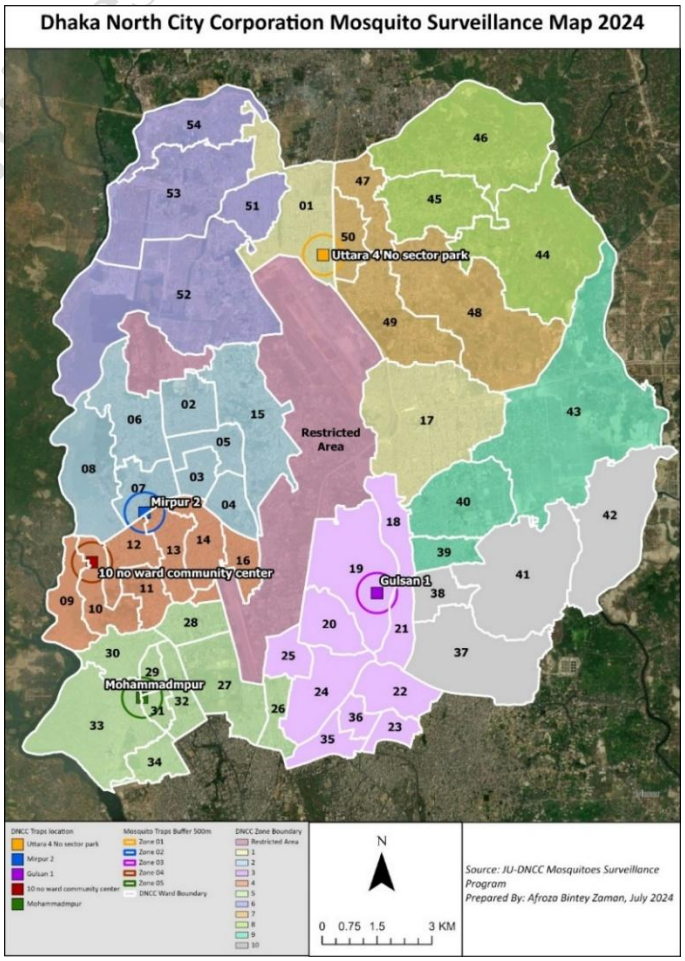
Zone	Traps Location	GPS Location
01	Uttara-4 No sector park	23.8613672,90.4035528
02	Mirpur-2, Vander office, DNCC	23.8036248,90.3601995
03	Gulsan 1, Purantan Vander office	23.7860557,90.4164024
04	10 No ward community center, Mirpur-1	23.7922967,90.3467992
05	Mohammadpur regional office of DNCC	23.7618721,90.3590884

For the Adult mosquito collection

1. Light trap
2. Gravid trap

For the mosquito larvae collection

1. Aedes X smart trap
2. Directly collection larvae from field.



Results:

Table 1. Collected Adult Mosquitoes from Moshar Machine (CO_2) traps in Week 100 (April 24-28, 2026)

Zone	N	*Ae. aegypti*	*Ae. albopictus*	*Cx. quinquefasciatus*	*Cx. tritaeniorhynchus*	*Ar. subalbatus*	*An. vagus*	*An. subpictus*	*An. annularis*
1	6059	5	2	4723	1181	137	4	3	4
2	556	2	2	408	84	60	0	0	0
3	4842	33	5	4515	144	144	1	0	0
4	1725	9	1	1136	560	16	3	0	0
5	1916	26	2	1471	345	72	0	0	0
Total	15098	75	12	12253	2314	429	8	3	4
%	100.00	0.50	0.08	81.16	15.33	2.84	0.05	0.02	0.03

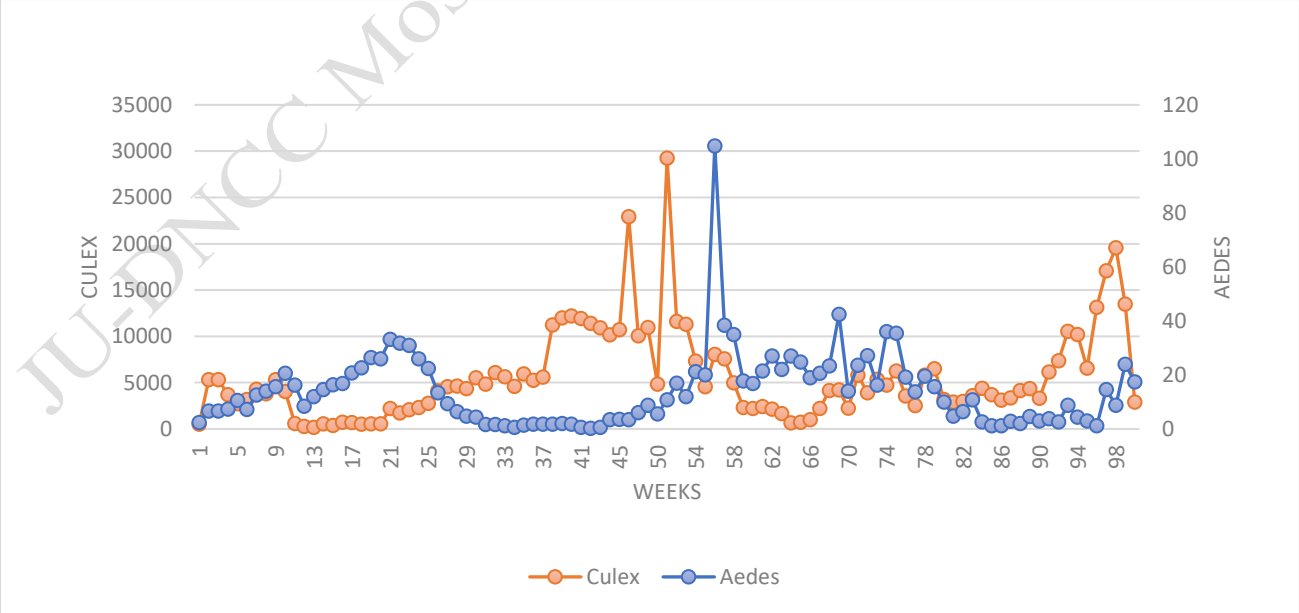


Fig. 1: Percentage of Adult Mosquitoes Collected by Moshar Machine (CO_2) traps in Week 100 (April 24-28, 2026)

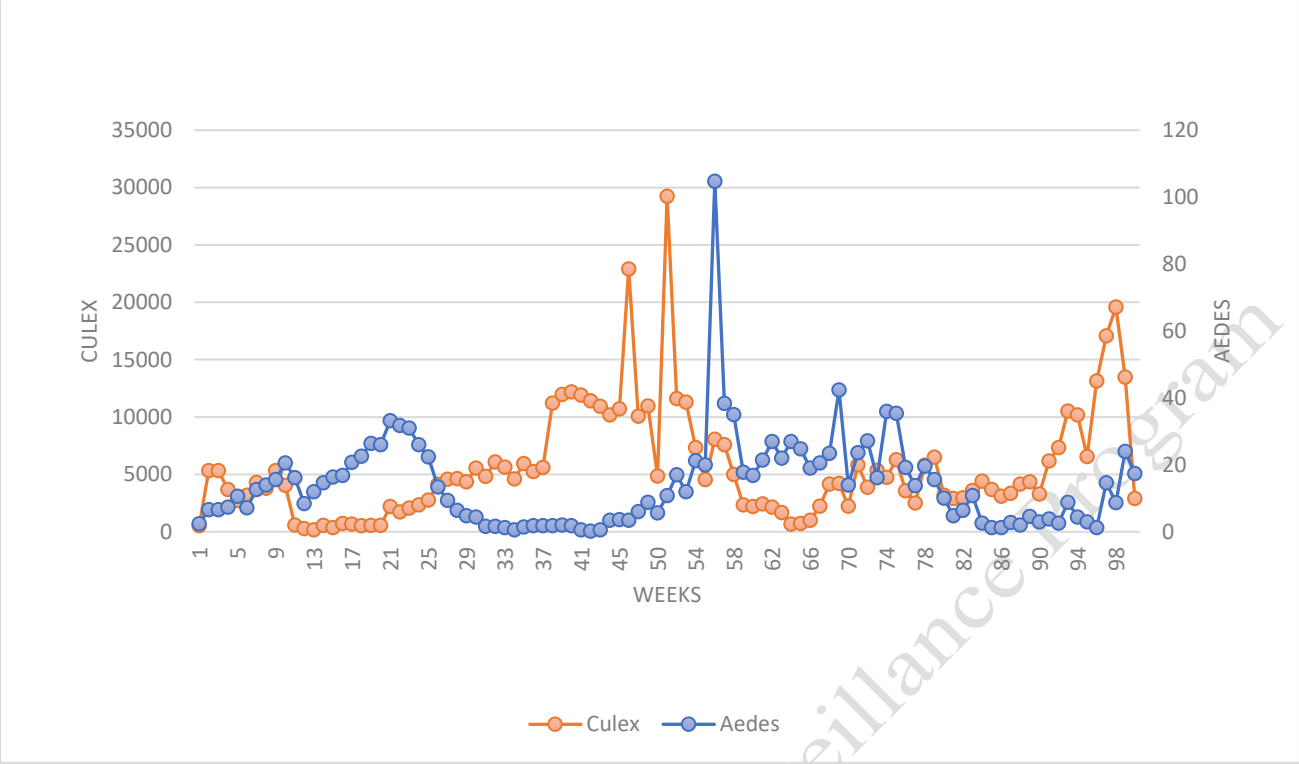


Fig 2: Average number of mosquitoes per Moshar Machine (CO_2) traps from Week 1 to Week 100 (May 2, 2024 - April 28, 2026)

Table 2. Collected Mosquito Larvae from *Aedes* X smart Traps in Week 100 (April 24-28, 2026)

Zone	N	*Ae. aegypti*	*Ae. albopictus*
1	11	0	11
2	0	0	0
3	6	0	6
4	0	0	0
5	6	6	0
Total	23	6	17
(%)	100	26.09	73.91

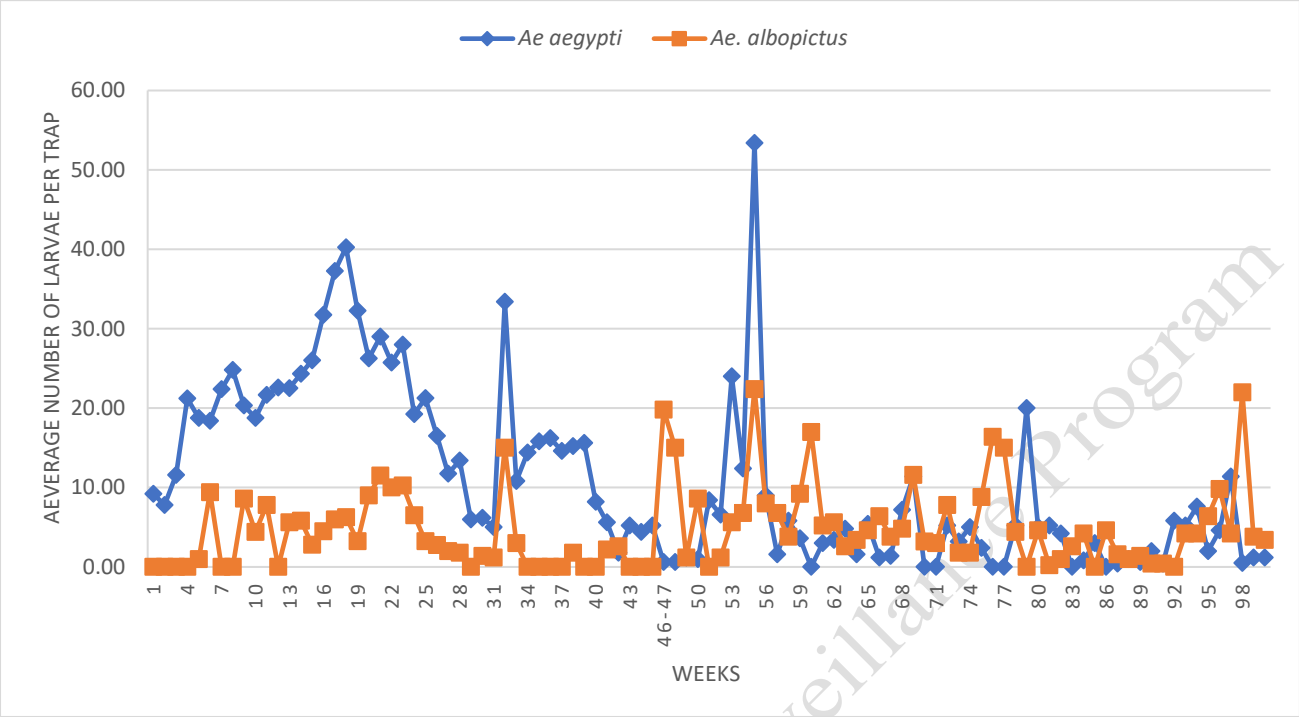


Fig 3: Average Number of *Aedes* Larvae per *Aedes* X Smart Trap in Zones 1-5 from Week 1 to Week 100 (May 2, 2024 - April 28, 2026)

Table 3. Collected Adult Mosquitoes from Gravid Trap in Week 100 (April 24-28, 2026)

Zone	Number of Mosquitoes	*Ae. aegypti*	*Ae. albopictus*	*Cx. quinquefasciatus*
1	2	1	0	1
2	3	0	1	2
3	2	0	0	2
4	1	0	0	1
5	2	1	0	1
Total	10	2	1	7
(%)	100	20.00	10.00	70.00

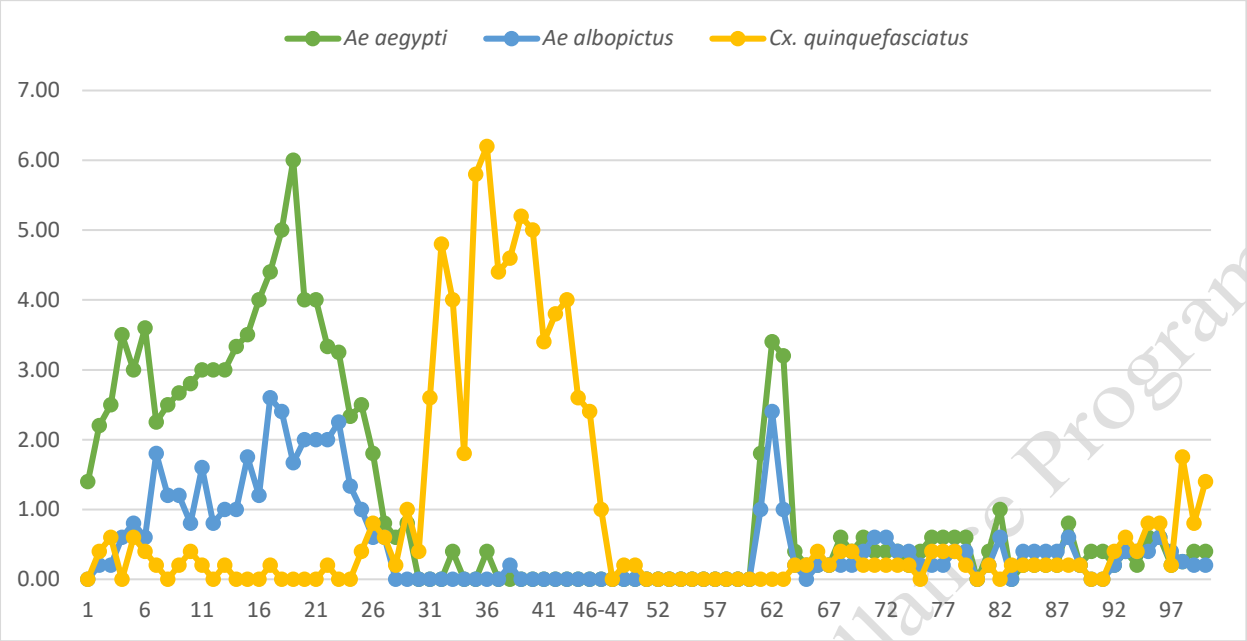


Fig 4: Average number of adult mosquitoes per Gravid trap in zones 1-5 from Week 1 to Week 100 (May 2, 2024 - April 28, 2026)

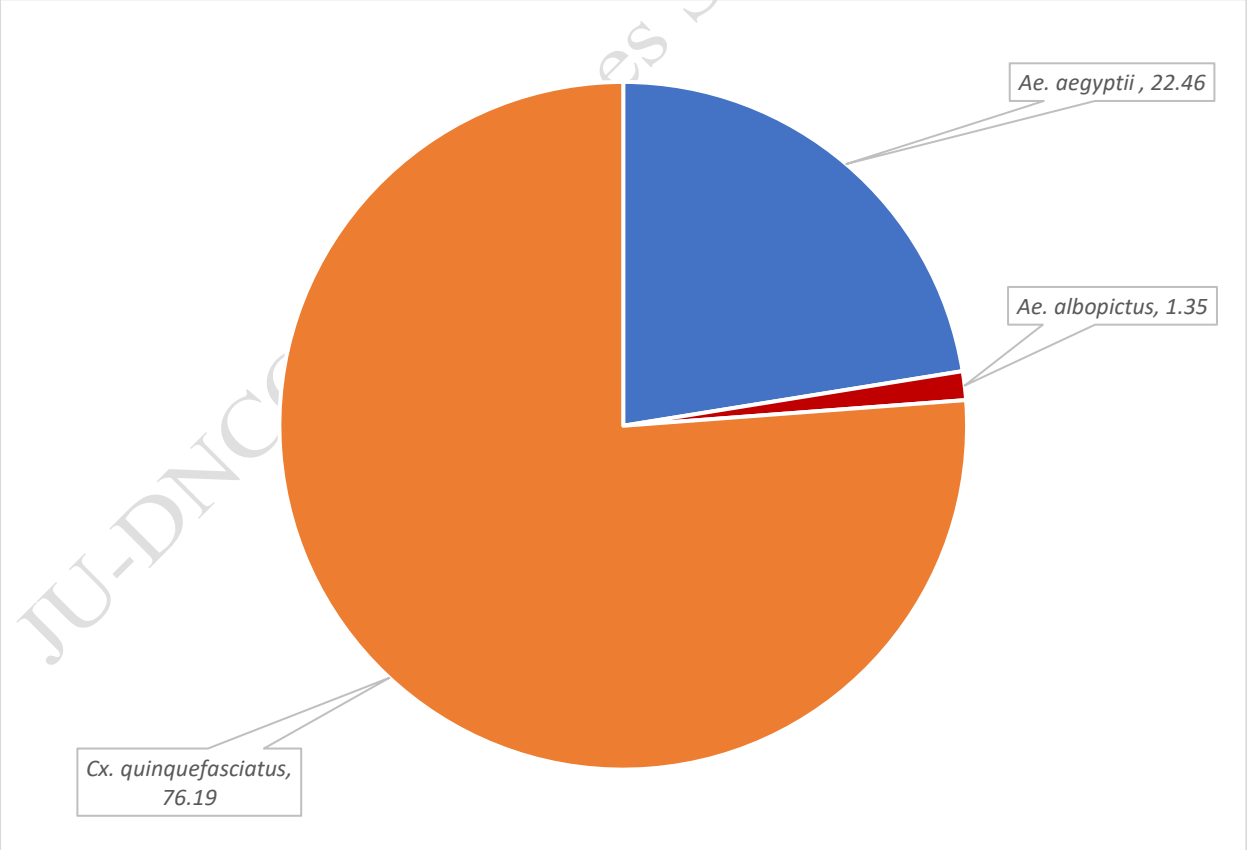
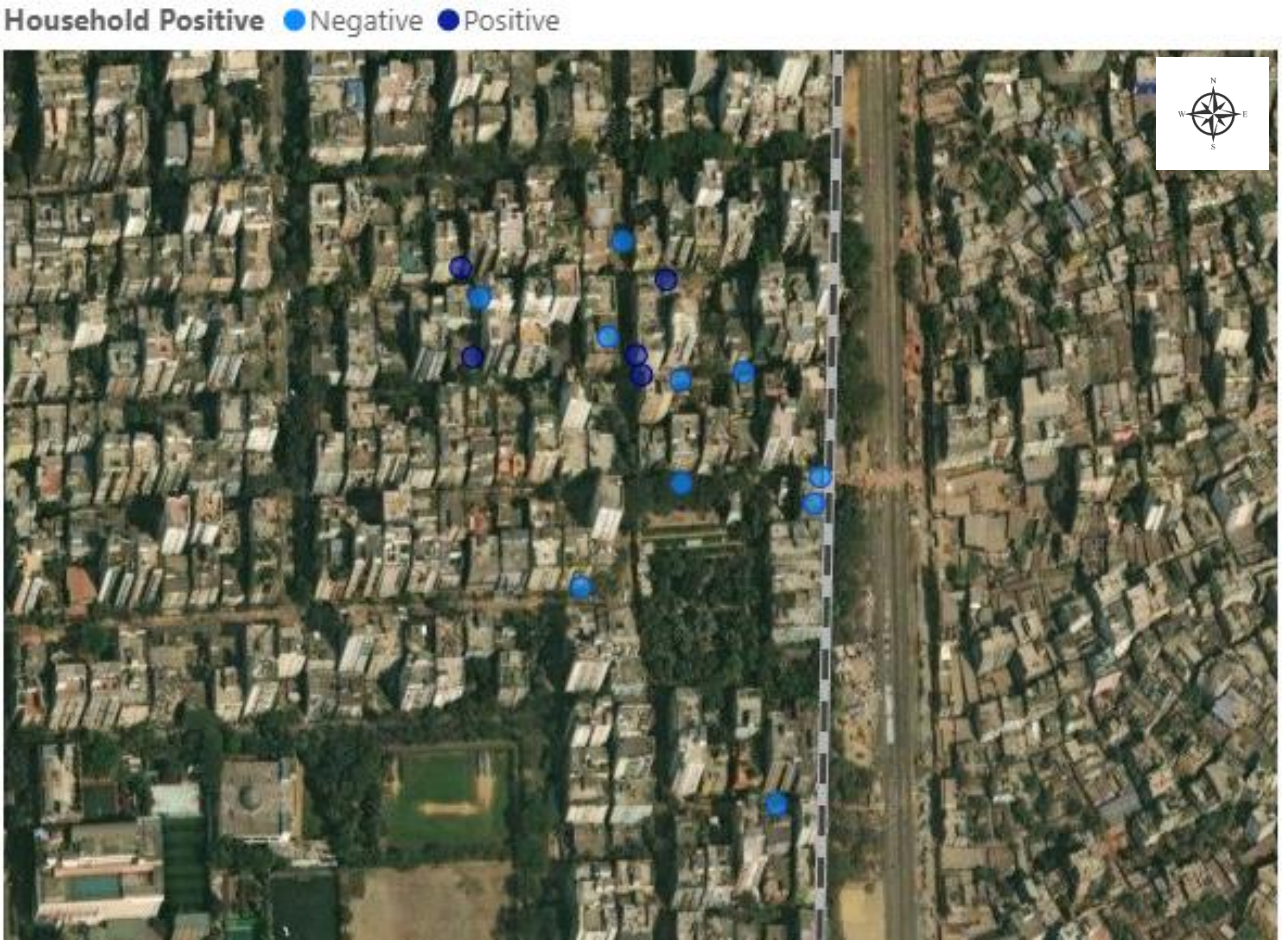


Fig. 5: Percentage of Mosquito Larvae from Zones (1-5) in Week 100 (April 24-28, 2026)

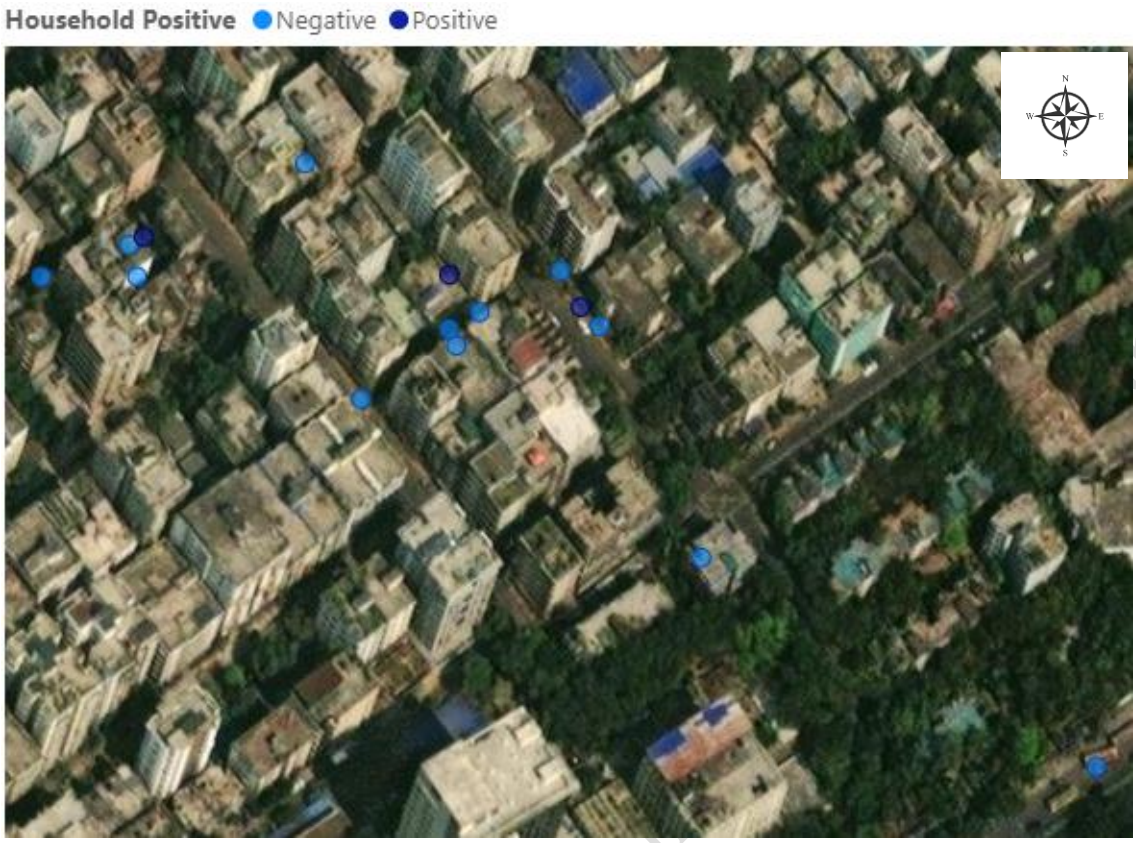
Table 4. Positive Larval Spots in Different Zones (1-5) with Estimated Number of Larvae in Week 100 (April 24-28, 2026)

Zone	GPS Location	*Ae. aegypti*	*Ae. albopictus*	*Cx. quinquefasciatus*	*Source*
1	23.8637475 90.4048594	52	0	0	Plastic bucket
	23.8636575 90.4048857	0	0	2478	Drain
	23.8640883 90.4050067	35	0	0	Other
	23.8637385 90.4040493	0	0	25	Other
	23.8641441 90.4039908	58	0	0	Pit
	Total	145	0	2503	
2	23.8030593 90.3568581	52	0	0	Basement/Parking
	23.8031413 90.3564919	21	0	0	Other
	23.8032382 90.3556395	53	0	0	Hole of water meter
	Total	126	0	0	
3	23.7868219 90.4157185	52	0	0	Basement/Parking Other
	23.7865572 90.4153503	0	0	21	Other
	23.7868252 90.4151591	0	0	23	Other
	23.7868098 90.414987	12	0	0	Flower tub & tray
	Total	64	0	44	
4	23.7889535 90.347531	22	0	0	Flower tub & tray
	23.7900314 90.3460412	80	45	0	Hole of water meter
	Total	102	45	0	

5	23.7618741 90.3593889	72	0	0	Metal drum
	23.7624825 90.3578391	112	0	0	Hole of water meter
	23.7624851 90.3577721	35	0	0	Other
	23.7626342 90.357736	23	0	0	Hole of water meter Metal drum
	23.7634213 90.3573874	72	0	0	Hole of water meter
	Total	314	0	0	
Grand Total		751	45	2547	

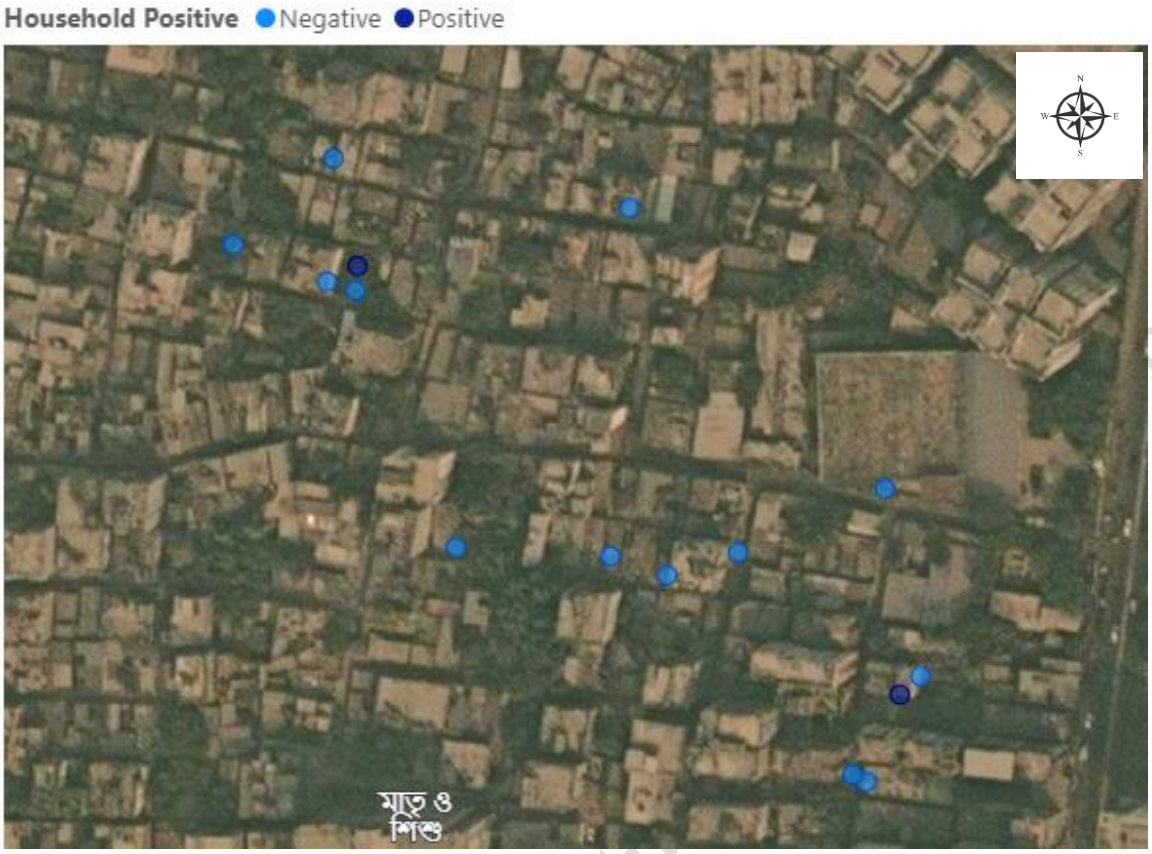


Map 1: Positive and Negative House of Uttara 4 No. Sector at Weeks 100

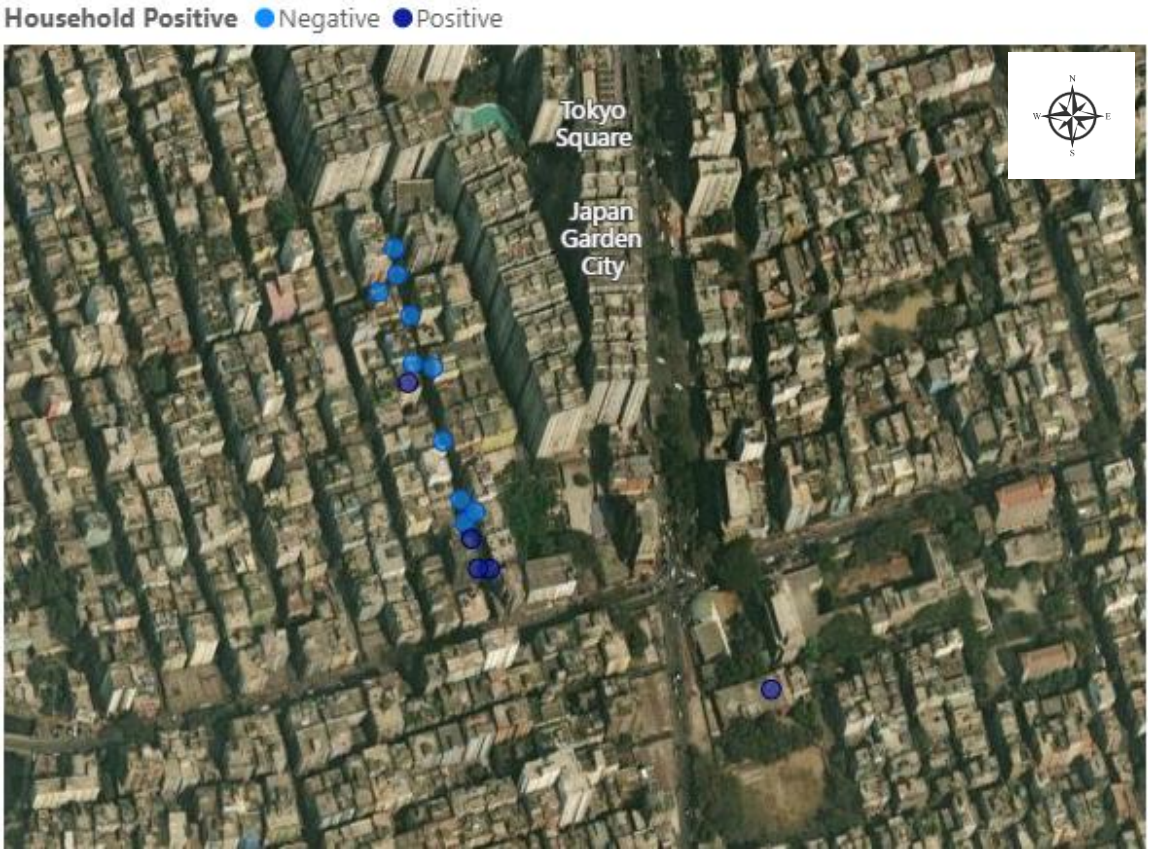


Map 2: Positive and Negative House of Mirpur 2 at Weeks 100

Map 3: Positive and Negative House of Gulshan 1 at Weeks 100



Map 4: Positive and Negative House of Mirpur 1 at Weeks 100



Map 5: Positive and Negative House of Mohammadpur at Weeks 100

Table 5: Positive House, Wet Container, BI, CI and HI in Zones (1-5) in Week 100 (April 24-28, 2026)

Zone	Total House	Positive House	Total Wet container	Positive Wet Container	BI	CI	HI
1	15	5	29	5	33.33	17.24	33.33
2	15	3	27	3	20.00	11.11	20.00
3	15	4	37	9	60.00	24.32	26.67
4	15	2	22	3	20.00	13.64	13.33
5	15	5	31	5	33.33	16.13	33.33

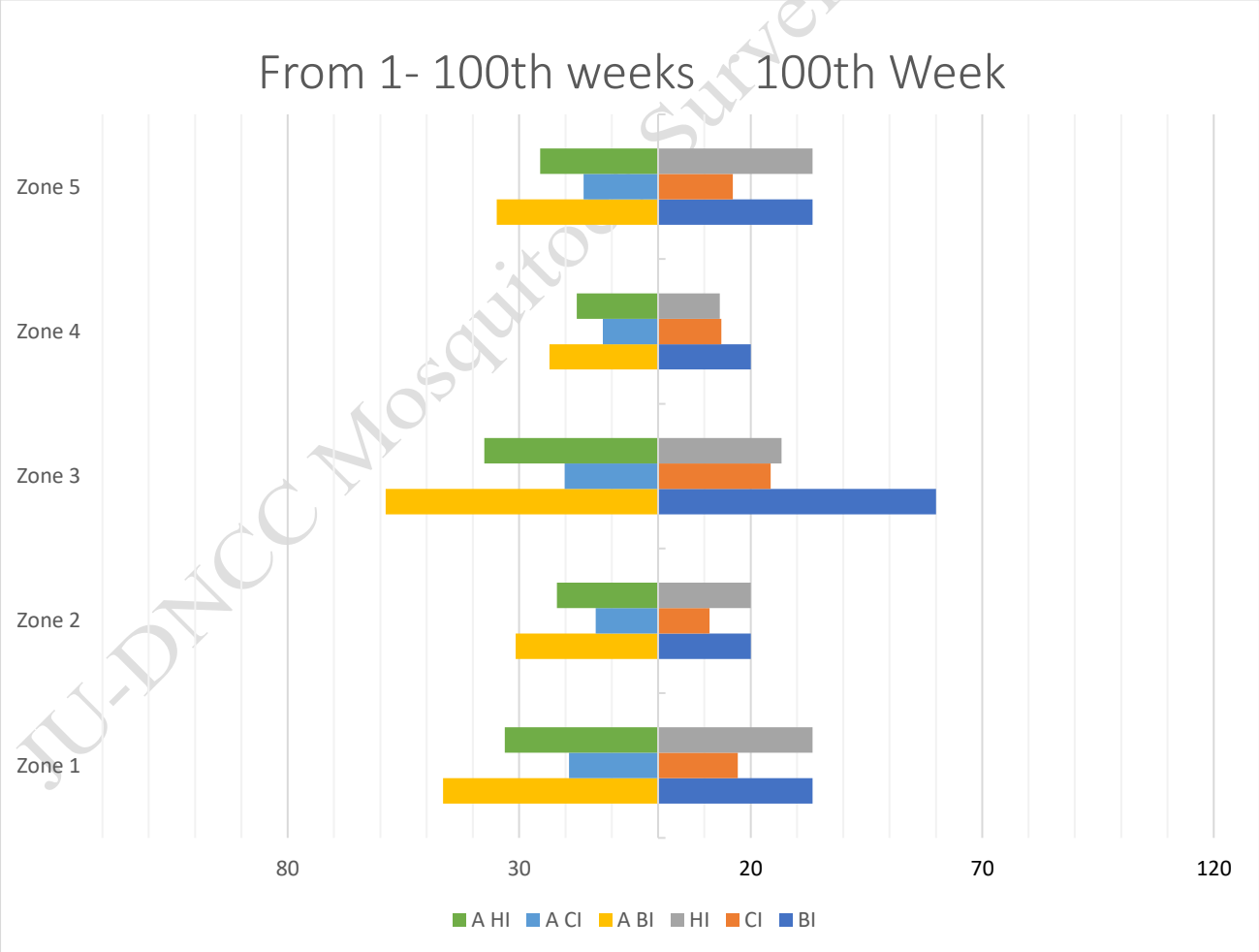


Fig. 6: BI, CI and HI in Different Zones (1-5) of Dhaka north City Corporation

***NB: "A" stands for Average from 1st week.**

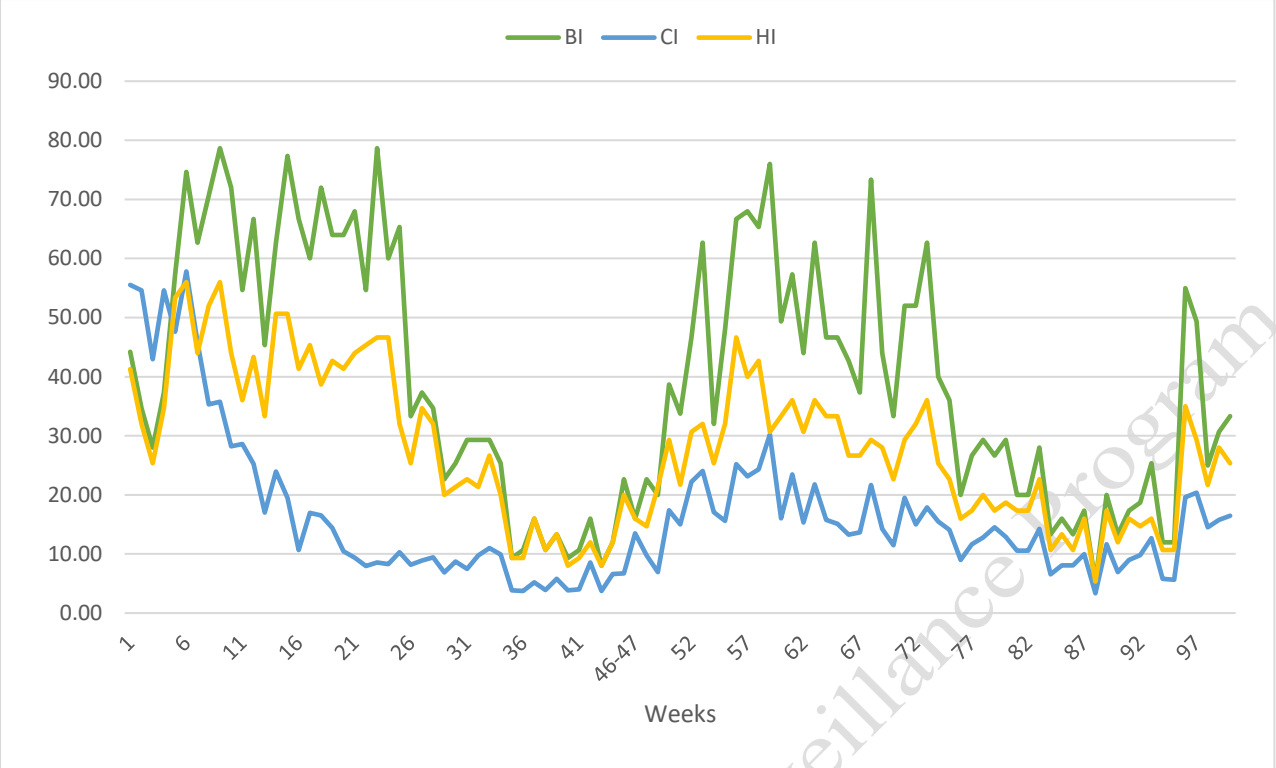


Fig 7: Mosquitoes population fluctuation (BI, CI, HI) from Week 1 to Week 100 (May 2, 2024 - April 28, 2026)

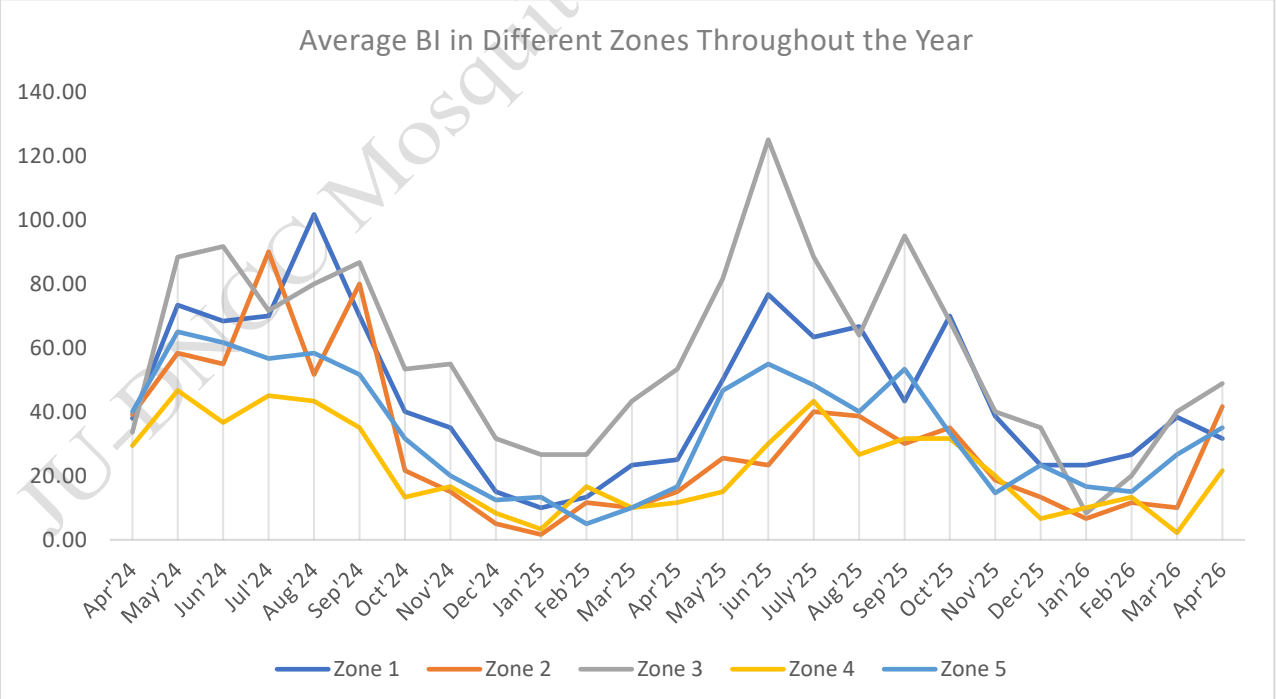


Fig. 8: Breteau Index (BI) in Different Zones from Week 1 to Week 100 (May 2, 2024 - April 28, 2026)

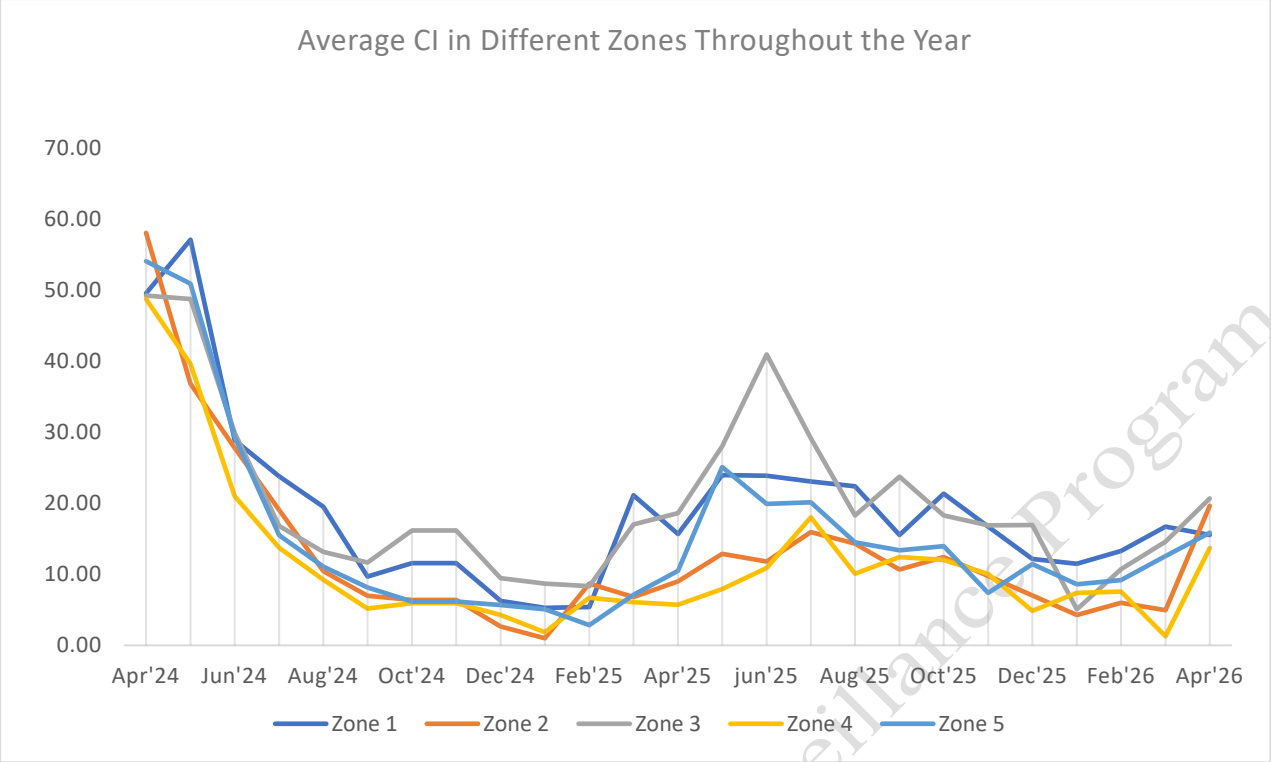


Fig. 9: Container Index (CI) in Different Zones from Week 1 to Week 100 (May 2, 2024 - April 28, 2026)

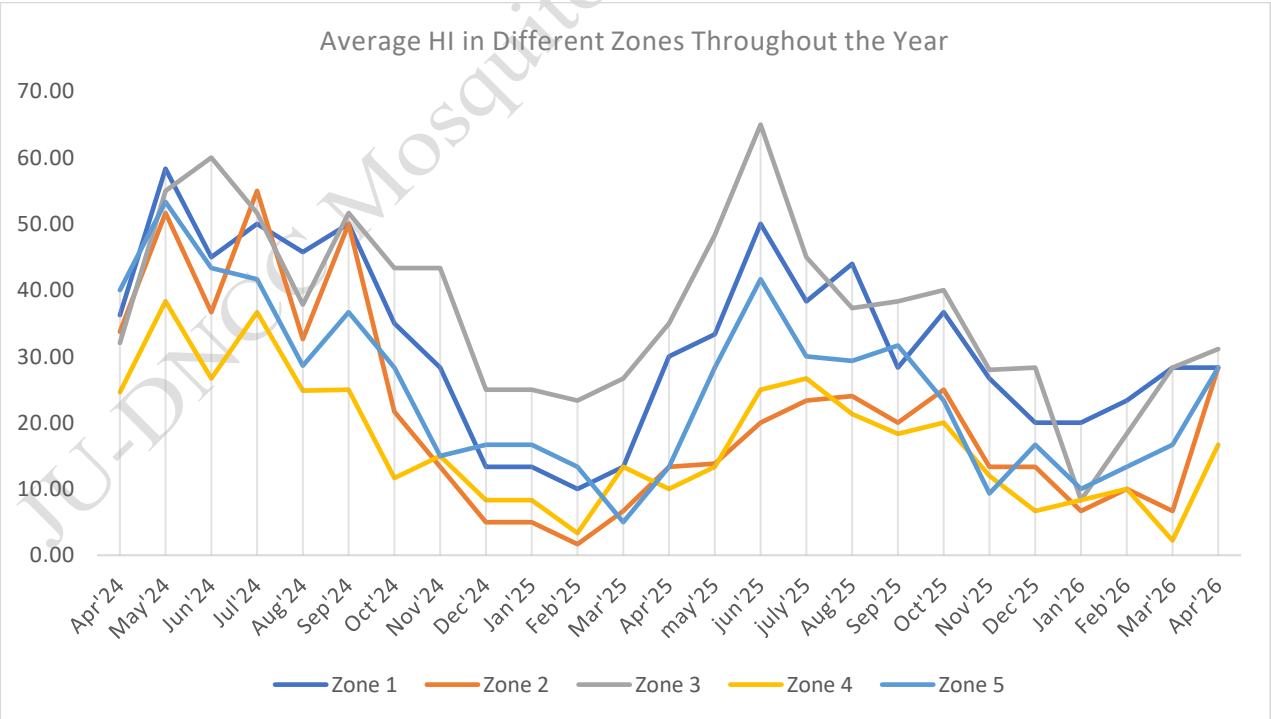


Fig. 10: House Index (HI) in Different Zones from Week 1 to Week 100 (May 2, 2024 - April 28, 2026)

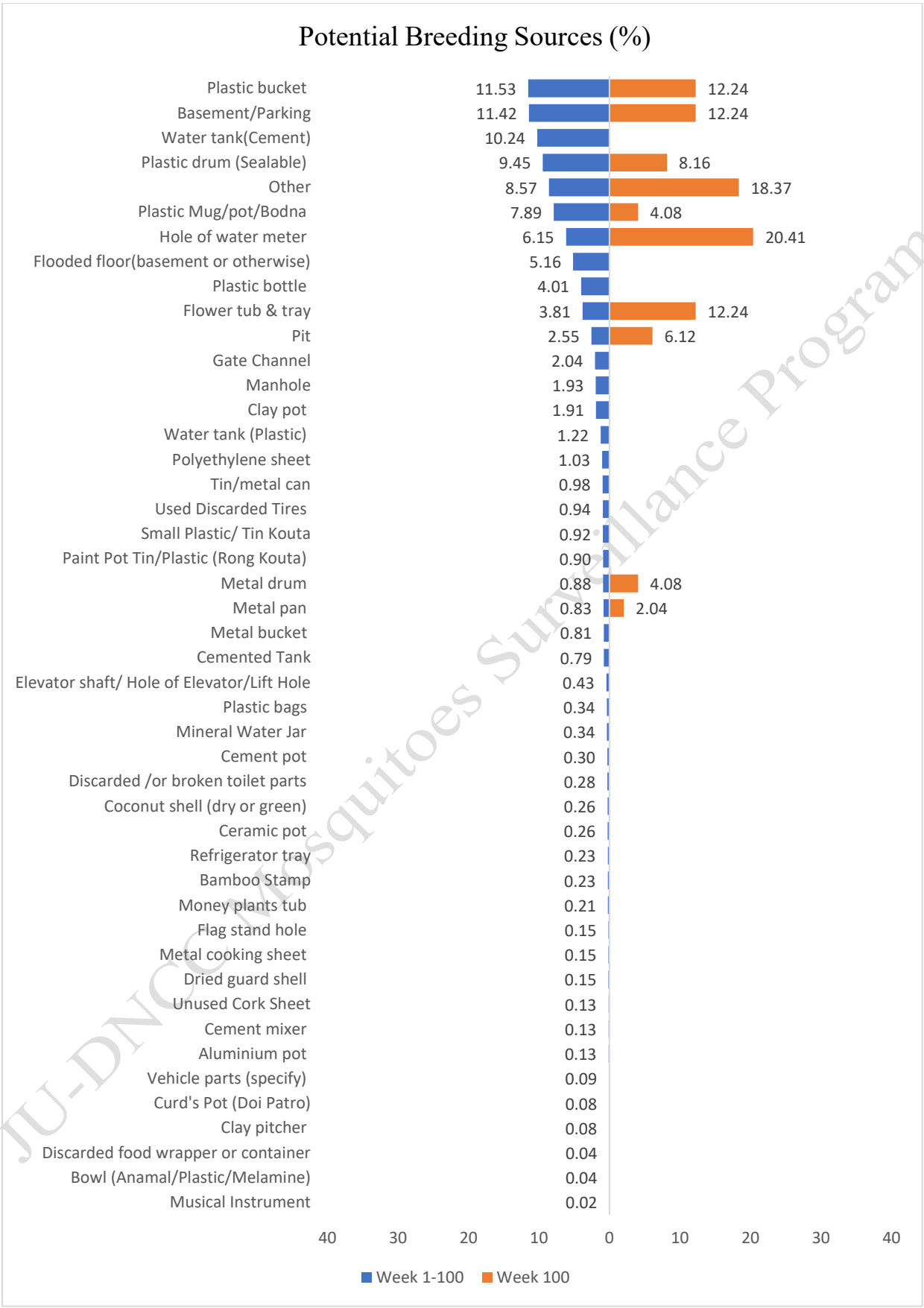


Fig. 11: Container Frequency for *Aedes* mosquitoes in Zones (1-5)

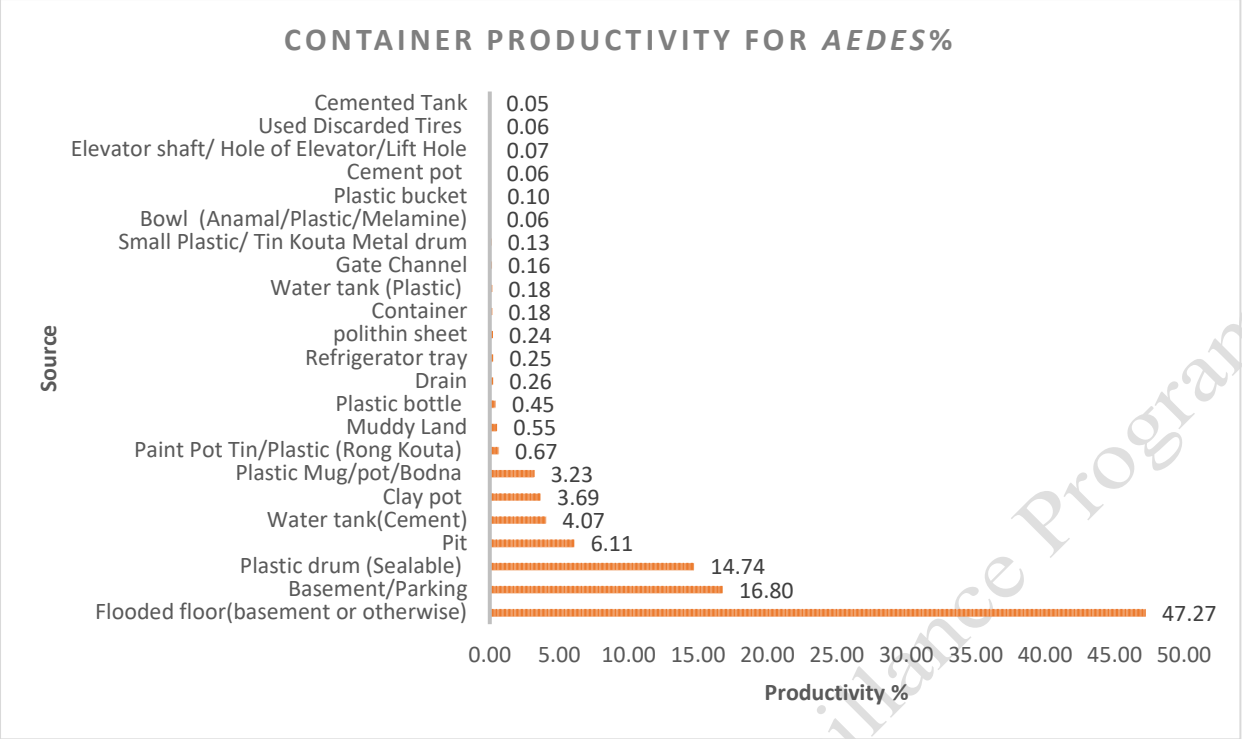


Fig. 12: Container Productivity of *Aedes* mosquito in DNCC from Week 1 to Week 100 (May 2, 2024 - April 28, 2026)

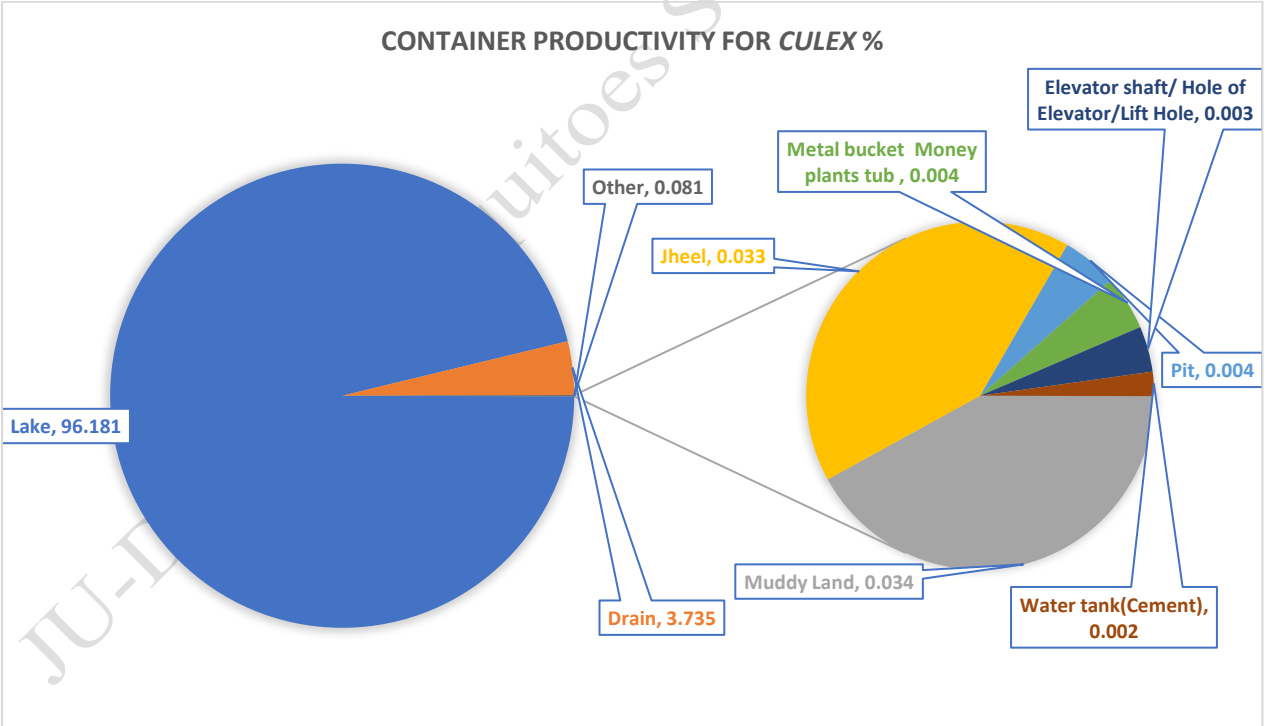


Fig. 13: Container Productivity of *Culex* mosquito in DNCC, from Week 1 to Week 100 (May 2, 2024 - April 28, 2026)

Table 6: Container Frequency & Probable potential Wet Container in zones (1-5) from Week 1 to Week 100 (May 2, 2024 - April 28, 2026)

Sources	+House	-WC	+WC	**Total WC**	% WC	% PWC
Plastic bucket	208	263	352	615	11.53	6.60
Basement/Parking	222	43	566	609	11.42	10.61
Water tank(Cement)	169	252	294	546	10.24	5.51
Plastic drum (Sealable)	235	78	426	504	9.45	7.99
Other	224	130	327	457	8.57	6.13
Plastic Mug/pot/Bodna	172	82	339	421	7.89	6.36
Hole of water meter	62	6	322	328	6.15	6.04
Flooded floor(basement or otherwise)	128	138	137	275	5.16	2.57
Plastic bottle	80	63	151	214	4.01	2.83
Flower tub & tray	76	25	178	203	3.81	3.34
Pit	66	22	114	136	2.55	2.14
Gate Channel	32	34	75	109	2.04	1.41
Manhole	56	29	74	103	1.93	1.39
Clay pot	83	11	91	102	1.91	1.71
Water tank (Plastic)	20	28	37	65	1.22	0.69
Polyethylene sheet	34	3	52	55	1.03	0.98
Tin/metal can	30	0	52	52	0.98	0.98
Used Discarded Tires	29	16	34	50	0.94	0.64
Small Plastic/ Tin Kouta	24	9	40	49	0.92	0.75
Paint Pot Tin/Plastic (Rong Kouta)	30	5	43	48	0.90	0.81
Metal drum	19	7	40	47	0.88	0.75
Metal pan	18	3	41	44	0.83	0.77
Metal bucket	21	5	38	43	0.81	0.71
Cemented Tank	22	13	29	42	0.79	0.54
Elevator shaft/ Hole of Elevator/Lift Hole	8	4	19	23	0.43	0.36
Mineral Water Jar	6	4	14	18	0.34	0.26
Plastic bags	8	1	17	18	0.34	0.32
Cement pot	11	1	15	16	0.30	0.28
Discarded /or broken toilet parts	12	2	13	15	0.28	0.24
Ceramic pot	13	0	14	14	0.26	0.26
Coconut shell (dry or green)	4	0	14	14	0.26	0.26
Bamboo Stamp	9	0	12	12	0.23	0.23
Refrigerator tray	9	0	12	12	0.23	0.23
Money plants tub	8	0	11	11	0.21	0.21
Dried guard shell	5	0	8	8	0.15	0.15
Metal cooking sheet	2	0	8	8	0.15	0.15
Flag stand hole	4	1	7	8	0.15	0.13
Aluminium pot	4	0	7	7	0.13	0.13
Cement mixer	2	0	7	7	0.13	0.13
Unused Cork Sheet	5	1	6	7	0.13	0.11
Vehicle parts (specify)	3	1	4	5	0.09	0.08
Clay pitcher	3	1	3	4	0.08	0.06
Curd's Pot (Doi Patro)	3	0	4	4	0.08	0.08
Bowl (Anamal/Plastic/Melamine)	2	0	2	2	0.04	0.04
Discarded food wrapper or container	1	0	2	2	0.04	0.04
Musical Instrument	1	0	1	1	0.02	0.02

Table 7: Percentage of breeding sources in different zone from Week 1 to Week 100 (May 2, 2024 - April 28, 2026)

Containers	Percentage of Breeding Sources				
	Zone 01	Zone 02	Zone 03	Zone 04	Zone 05
Plastic bucket	1.99	2.03	2.23	2.87	2.42
Basement/Parking	2.87	1.74	2.98	1.11	2.72
Water tank(Cement)	1.31	1.67	1.33	2.98	2.94
Plastic drum (Sealable)	1.35	2.29	1.65	2.21	1.95
Other	2.79	1.48	2.36	0.69	1.24
Plastic Mug/pot/Bodna	1.41	1.43	1.50	2.19	1.37
Hole of water meter	0.75	1.16	0.28	2.03	1.93
Flooded floor(basement or otherwise)	1.33	1.14	0.86	0.56	1.26
Plastic bottle	0.53	0.94	0.58	1.05	0.92
Flower tub & tray	1.09	0.58	1.28	0.54	0.32
Pit	0.66	0.38	0.83	0.32	0.38
Gate Channel	0.79	0.19	0.58	0.08	0.41
Manhole	0.79	0.23	0.60	0.21	0.11
Clay pot	0.24	0.39	0.58	0.23	0.47
Water tank (Plastic)	0.00	0.77	0.17	0.15	0.13
Polyethylene sheet	0.30	0.28	0.21	0.17	0.08
Tin/metal can	0.28	0.26	0.19	0.19	0.06
Used Discarded Tires	0.36	0.26	0.17	0.08	0.08
Small Plastic/ Tin Kouta	0.24	0.17	0.26	0.11	0.13
Paint Pot Tin/Plastic (Rong Kouta)	0.21	0.09	0.26	0.21	0.13
Metal drum	0.17	0.09	0.21	0.28	0.13
Metal pan	0.17	0.17	0.26	0.09	0.13
Metal bucket	0.11	0.08	0.23	0.24	0.15
Cemented Tank	0.15	0.11	0.19	0.23	0.11
Elevator shaft/ Hole of Elevator/Lift Hole	0.19	0.09	0.08	0.00	0.08
Mineral Water Jar	0.04	0.02	0.06	0.15	0.08
Plastic bags	0.04	0.02	0.08	0.11	0.09
Cement pot	0.04	0.00	0.11	0.02	0.13
Discarded /or broken toilet parts	0.02	0.13	0.04	0.00	0.09
Ceramic pot	0.06	0.02	0.06	0.02	0.11
Coconut shell (dry or green)	0.06	0.08	0.06	0.04	0.04
Bamboo Stamp	0.06	0.08	0.04	0.06	0.00
Refrigerator tray	0.08	0.04	0.06	0.04	0.02
Money plants tub	0.06	0.04	0.06	0.00	0.06
Dried guard shell	0.04	0.02	0.08	0.00	0.02
Metal cooking sheet	0.00	0.02	0.06	0.04	0.04
Flag stand hole	0.08	0.02	0.02	0.00	0.04
Aluminium pot	0.02	0.04	0.00	0.06	0.02
Cement mixer	0.00	0.04	0.04	0.02	0.04
Unused Cork Sheet	0.00	0.02	0.04	0.02	0.06
Vehicle parts (specify)	0.02	0.00	0.06	0.02	0.00
Clay pitcher	0.04	0.00	0.02	0.02	0.00
Curd's Pot (Doi Patro)	0.02	0.02	0.04	0.00	0.00
Bowl (Anamal/Plastic/Melamine)	0.02	0.02	0.00	0.00	0.00
Discarded food wrapper or container	0.00	0.00	0.04	0.00	0.00
Musical Instrument	0.02	0.00	0.00	0.00	0.00

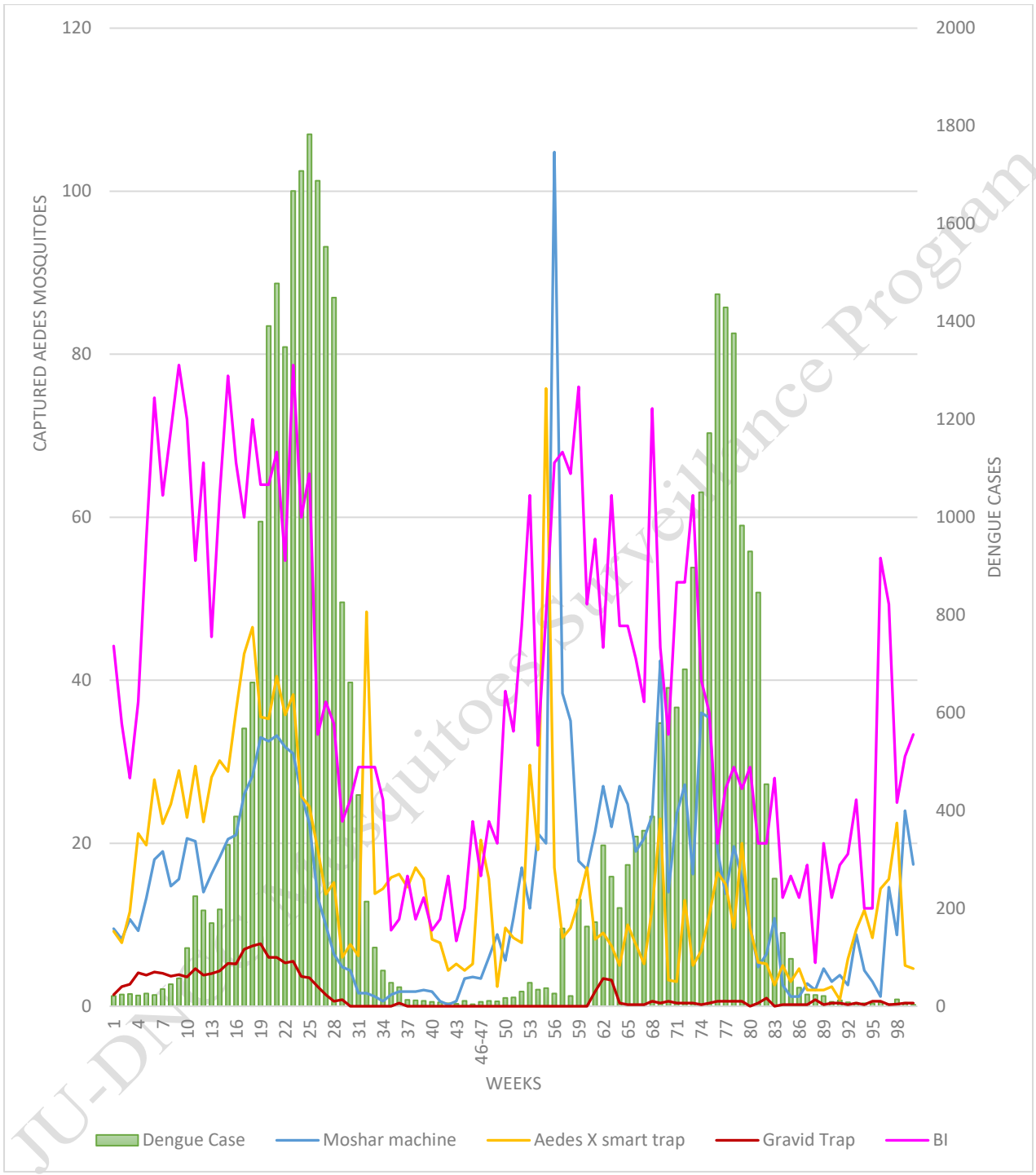


Fig. 14: Correlation between Dengue Cases and *Aedes* Mosquitoes Captured by per Moshar Machine CO_2 traps, Aedes X smart traps, and Gravid traps

NB: DNCC dengue cases only

Photographs of Mosquitoes Surveillance

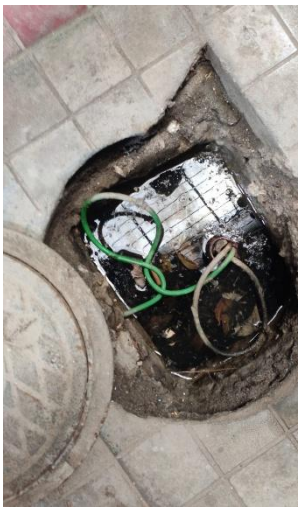








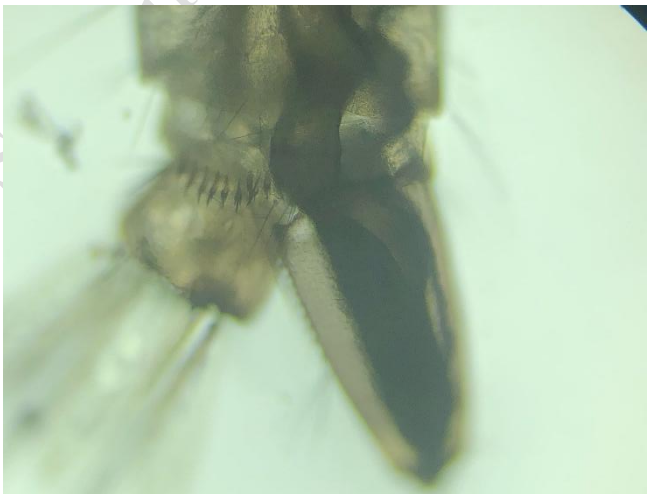
Samples Collection from Field






Samples Processing and Identification



Comments:

The mosquito density is decreasing and the dengue cases declining rapidly. The Breteau Index (BI) is increased in week 100. It is time for taking precaution and preparation for higher mosquito control. Moreover, this highlights the importance of continued surveillance to uncover hidden risks and to guide timely interventions.

For Aedes Mosquito Control

 Aedes mosquito density varies across locations, with notable breeding found in plastic drums, buckets, flooded basements, and water tanks, as seen in larval and trap data.

 Continuous surveillance is essential to monitor trends and target control interventions effectively.

 Frequent cleaning and management of water-holding containers (e.g., pots, bottles, plastic drums, and construction site debris) are vital.

 Permanent breeding habitats should be managed with larvicides or Insect Growth Regulators (IGRs) for sustained control.

 Construction sites must be regularly inspected and treated due to their high potential for breeding.

For Other Mosquito Control

 Drainage systems should be kept flowing to prevent stagnant water accumulation.

 Canals, ponds, lakes, and muddy lowlands should be cleaned of waste, weeds, and organic matter.

 Septic tanks must be covered and regularly maintained.

 Emphasis should be placed on slum areas and waterlogged urban zones, which are significant breeding grounds for Culex mosquitoes.

Public Awareness and Community Involvement

 Launch targeted awareness campaigns, especially in vulnerable and high-risk areas.

 Encourage communities to eliminate standing water regularly.

 Promote participatory surveillance and control efforts, including homeowner engagement in larval source reduction.

Copy sent for your information and further action (FYI/FA):

1. CHO, Health Department, Dhaka North City Corporation
2. Secretary, Dhaka North City Corporation
3. PS to Administrator, Dhaka North City Corporation
4. Staff Officer of CEO, Dhaka North City Corporation
5. Office Copy

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Entomologist
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