Weekly Report on

JU-DNCC Mosquitoes Surveillance Program

Week 101 (May 1-5, 2026)

Submitted To

Chief Health officer
Dhaka North City Corporation
Dhaka, Bangladesh

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.

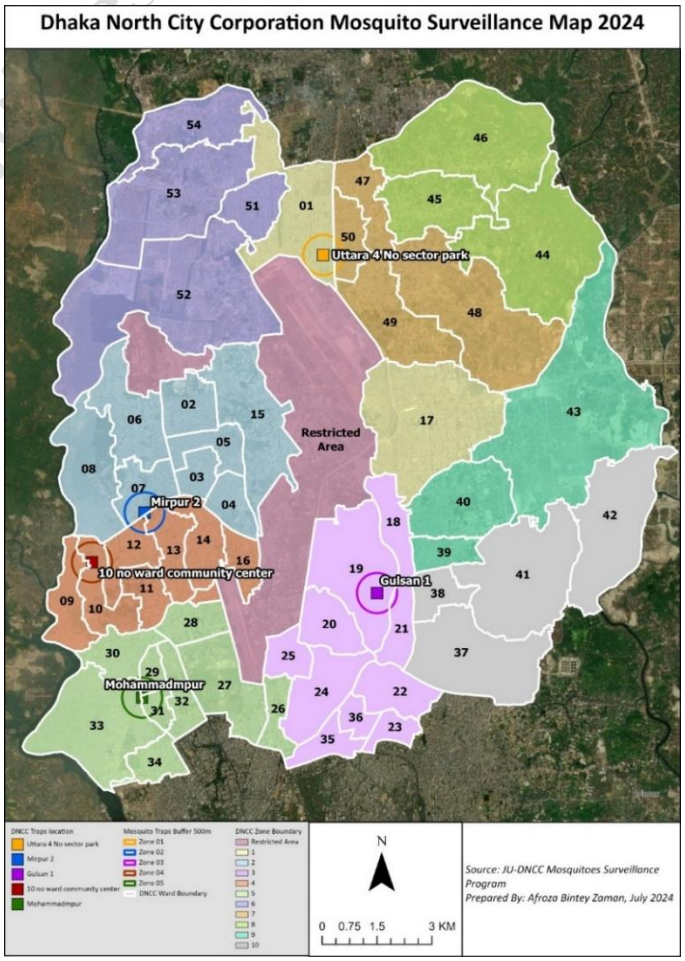
Zone	Traps Location	GPS Location
01	Uttara-4 No sector park	23.8613672,90.4035528
02	Mirpur-2, Vander office, DNCC	23.8036248,90.3601995
03	Gulsan 1, Purantan Vander office	23.7860557,90.4164024
04	10 No ward community center, Mirpur-1	23.7922967,90.3467992
05	Mohammadpur regional office of DNCC	23.7618721,90.3590884

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 101 (May 1-5, 2026)

Zone	N	*Ae. aegypti*	*Ae. albopictus*	*Cx. quinquefasciatus*	*Cx. tritaeniorhynchus*	*Ar. subalbatus*	*An. vagus*	*An. subpictus*	*An. annularis*
1	4205	7	3	3113	987	89	2	1	3
2	849	1	0	492	328	28	0	0	0
3	6006	5	1	3606	2306	88	0	0	0
4	28395	9	2	9351	18985	48	0	0	0
5	4132	19	0	3185	847	81	0	0	0
Total	43587	41	6	19747	23453	334	2	1	3
%	100.00	0.09	0.01	45.30	53.81	0.77	0.00	0.00	0.01

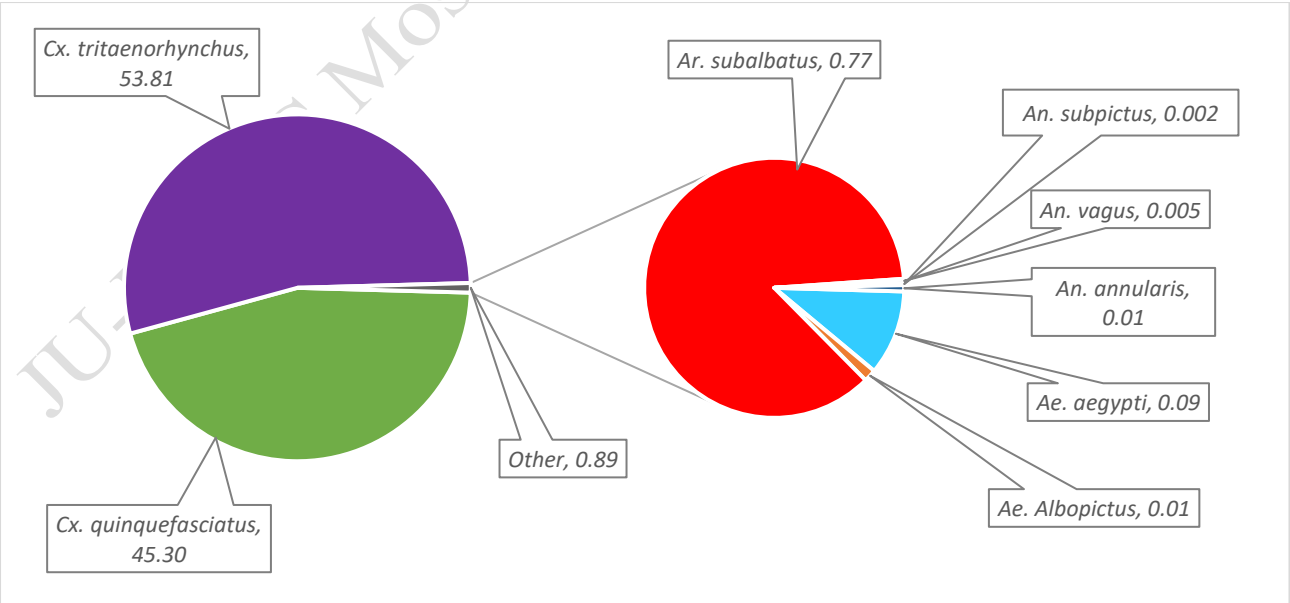


Fig. 1: Percentage of Adult Mosquitoes Collected by Moshar Machine (CO_2) traps in Week 101 (May 1-5, 2026)

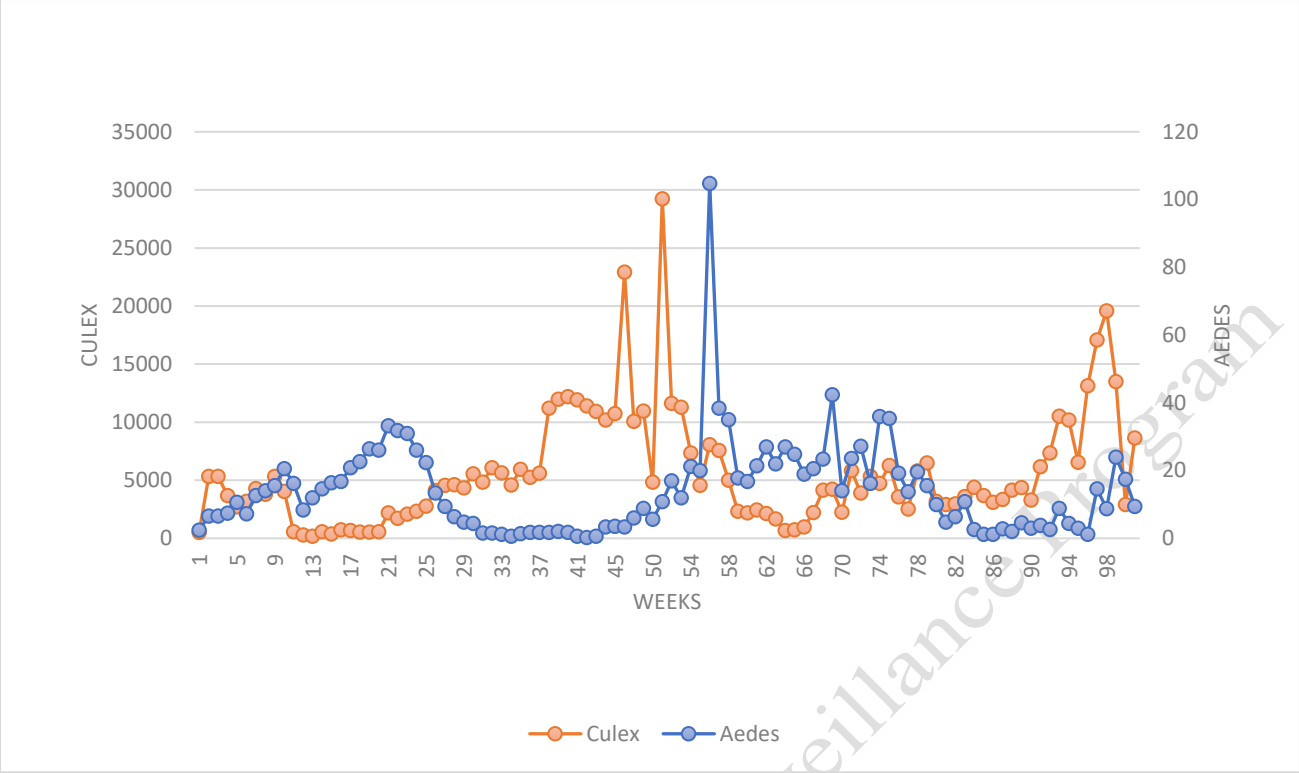


Fig 2: Average number of mosquitoes per Moshar Machine (CO_2) traps from Week 1 to Week 101 (May 2, 2024 - May 5, 2026)

Table 2. Collected Mosquito Larvae from *Aedes* X smart Traps in Week 101 (May 1-5, 2026)

Zone	N	*Ae. aegypti*	*Ae. albopictus*
1	23	23	0
2	28	0	28
3	8	8	0
4	12	0	12
5	27	0	27
Total	98	31	67
(%)	100	31.63	68.37

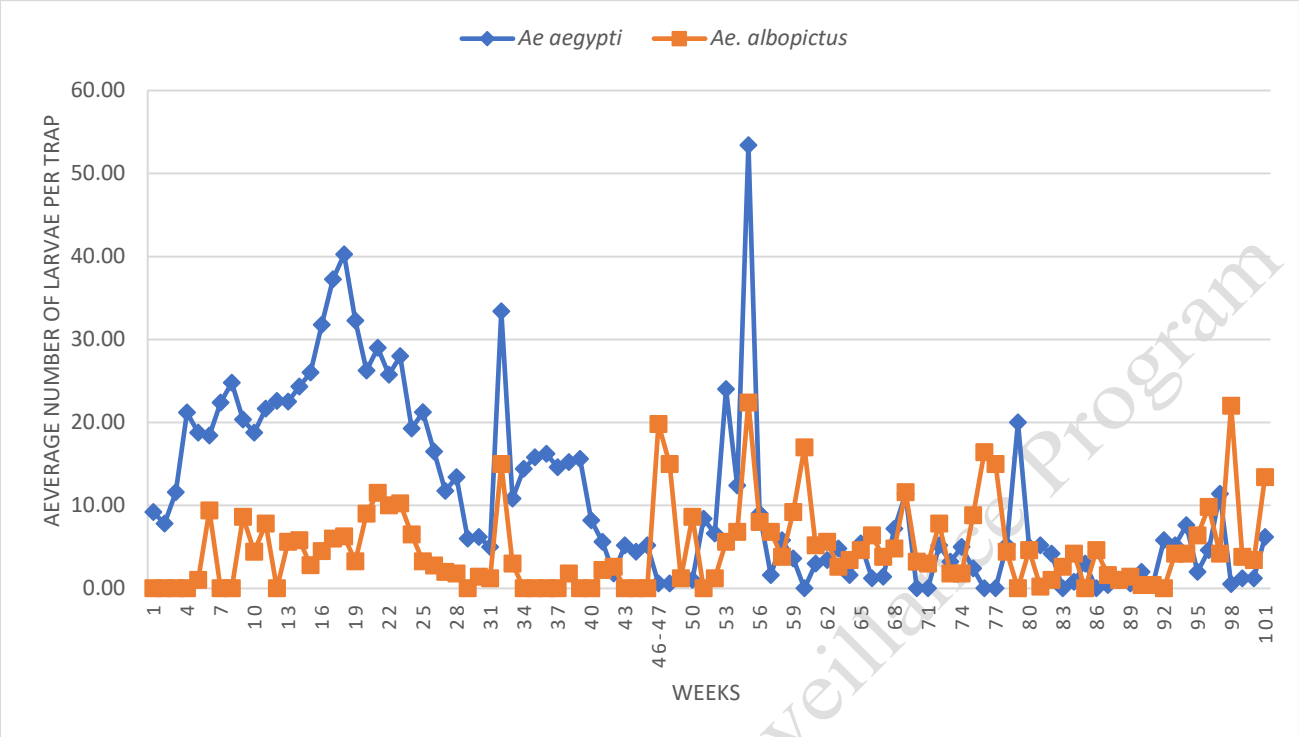


Fig 3: Average Number of *Aedes* Larvae per *Aedes* X Smart Trap in Zones 1-5 from Week 1 to Week 101 (May 2, 2024 - May 5, 2026)

Table 3. Collected Adult Mosquitoes from Gravid Trap in Week 101 (May 1-5, 2026)

Zone	Number of Mosquitoes	*Ae. aegypti*	*Ae. albopictus*	*Cx. quinquefasciatus*
1	3	1	0	2
2	2	0	1	1
3	0	0	0	0
4	2	0	0	2
5	1	0	0	1
Total	8	1	1	6
(%)	100	20.00	10.00	70.00

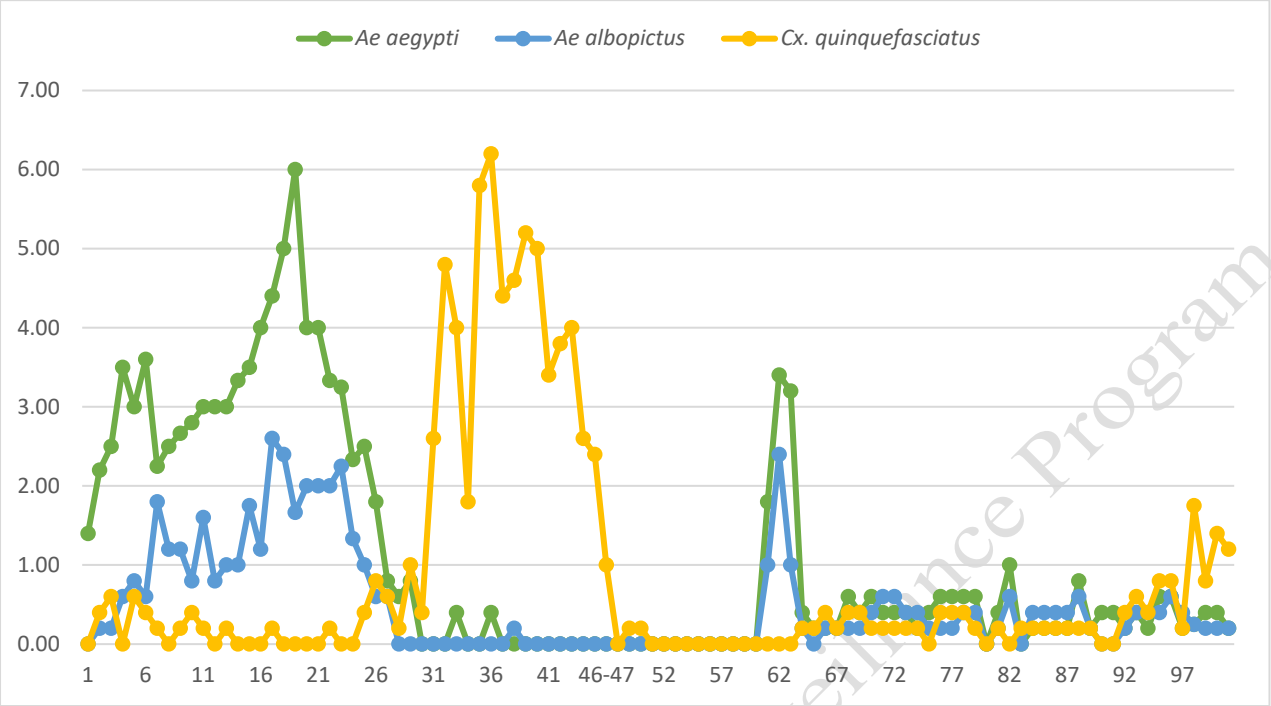


Fig 4: Average number of adult mosquitoes per Gravid trap in zones 1-5 from Week 1 to Week 101 (May 2, 2024 - May 5, 2026)

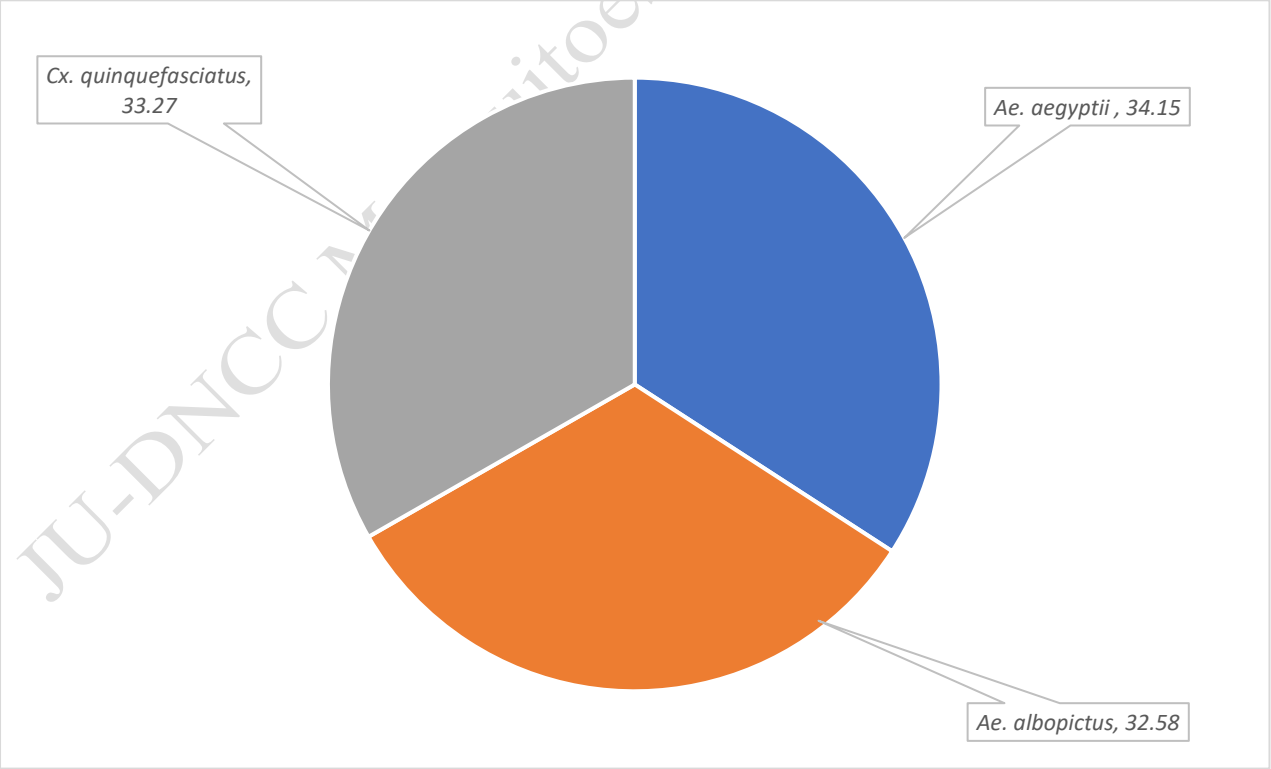
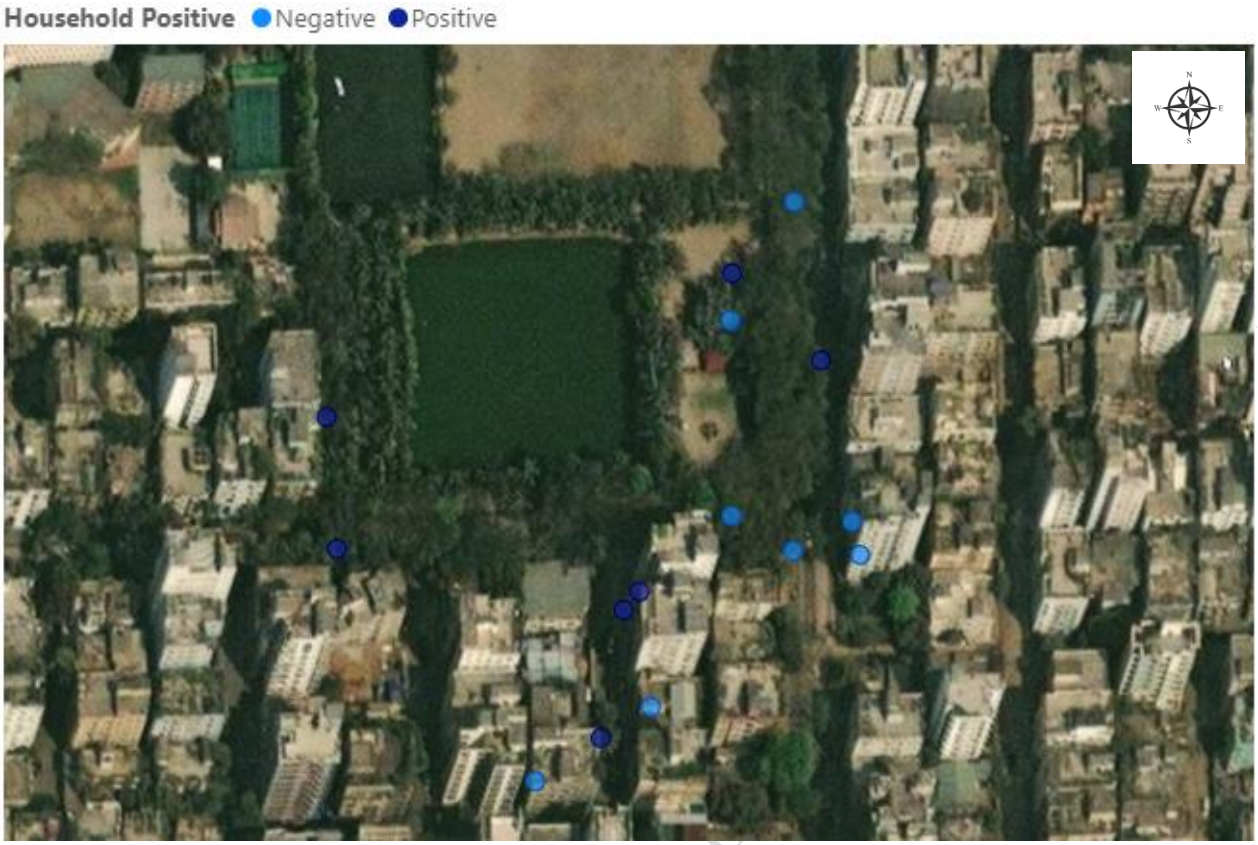


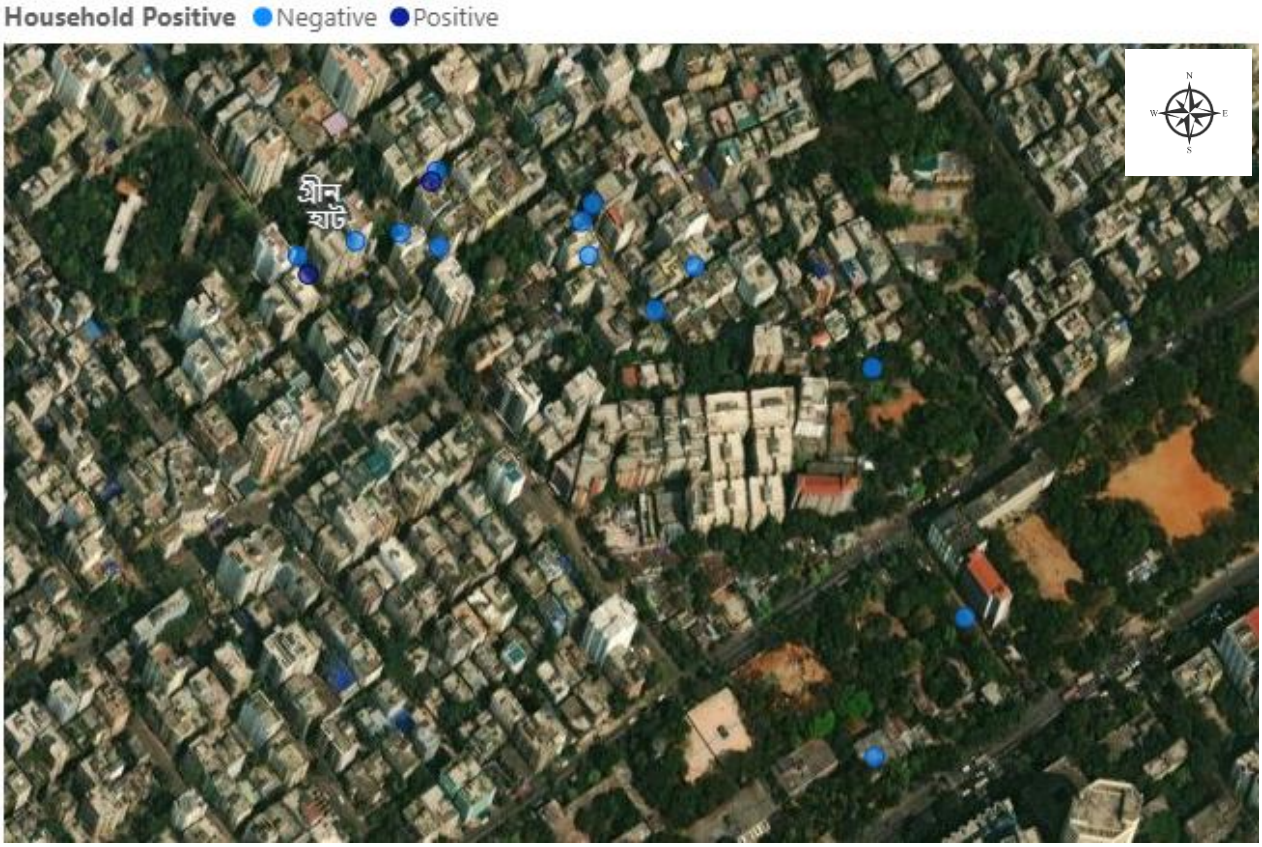
Fig. 5: Percentage of Mosquito Larvae from Zones (1-5) in Week 101 (May 1-5, 2026)

Table 4. Positive Larval Spots in Different Zones (1-5) with Estimated Number of Larvae in Week 101 (May 1-5, 2026)

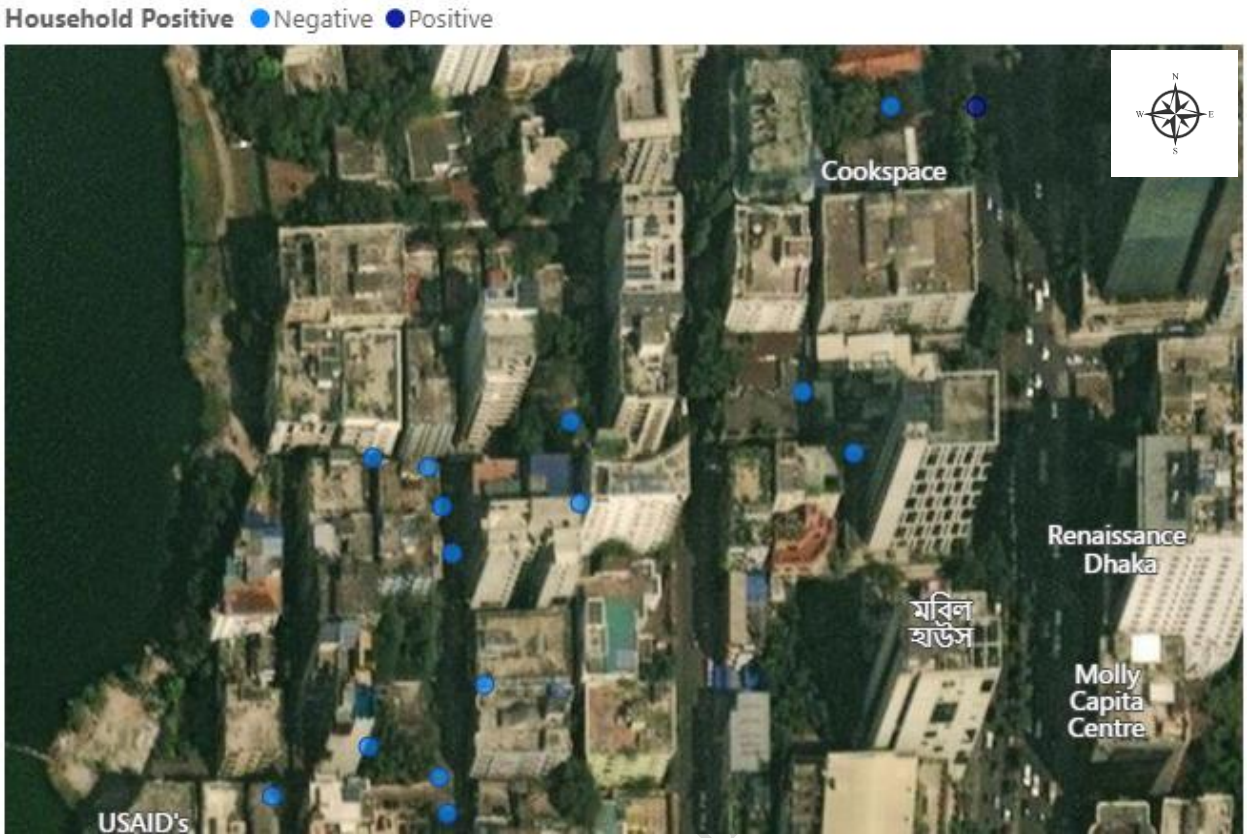
Zone	GPS Location	*Ae. aegypti*	*Ae. albopictus*	*Cx. quinquefasciatus*	*Source*
1	23.8603022 90.4031049	106	0	0	Flag stand hole
	23.8606684 90.4042364	0	0	35	Flower tub & tray
	23.8604466 90.4044835	8	0	0	Basement/Parking
	23.8594841 90.4038694	0	255	0	Used Discarded Tires
	23.8598101 90.4039337	0	0	21	Other
	23.8598572 90.4039777	27	0	0	Gate Channel
	23.859966 90.4031339	0	0	31	Basement/Parking
	Total	141	255	87	
2	23.8061525 90.3573674	30	0	0	Other
	23.8056797 90.3566831	32	0	0	Plastic bucket
	Total	62	0	0	
3	23.7857344 90.416873	1	0	0	Manhole
	Total	1	0	0	
4	23.7903119 90.3486028	0	222	0	Flower tub & tray
	23.7913588 90.3487641	0	0	225	Plastic Mug/pot/Bodna
	23.7922519 90.3488422	0	0	5	Polyethylene sheet
	Total	0	222	230	
5	23.7615705 90.3577064	42	0	0	Plastic bucket Hole of water meter
	23.7644045 90.356371	254	0	0	Basement/Parking
	23.7646189 90.3562927	0	0	170	Plastic drum (Sealable)
	Total	296	0	170	Total
Grand Total		500	477	487	



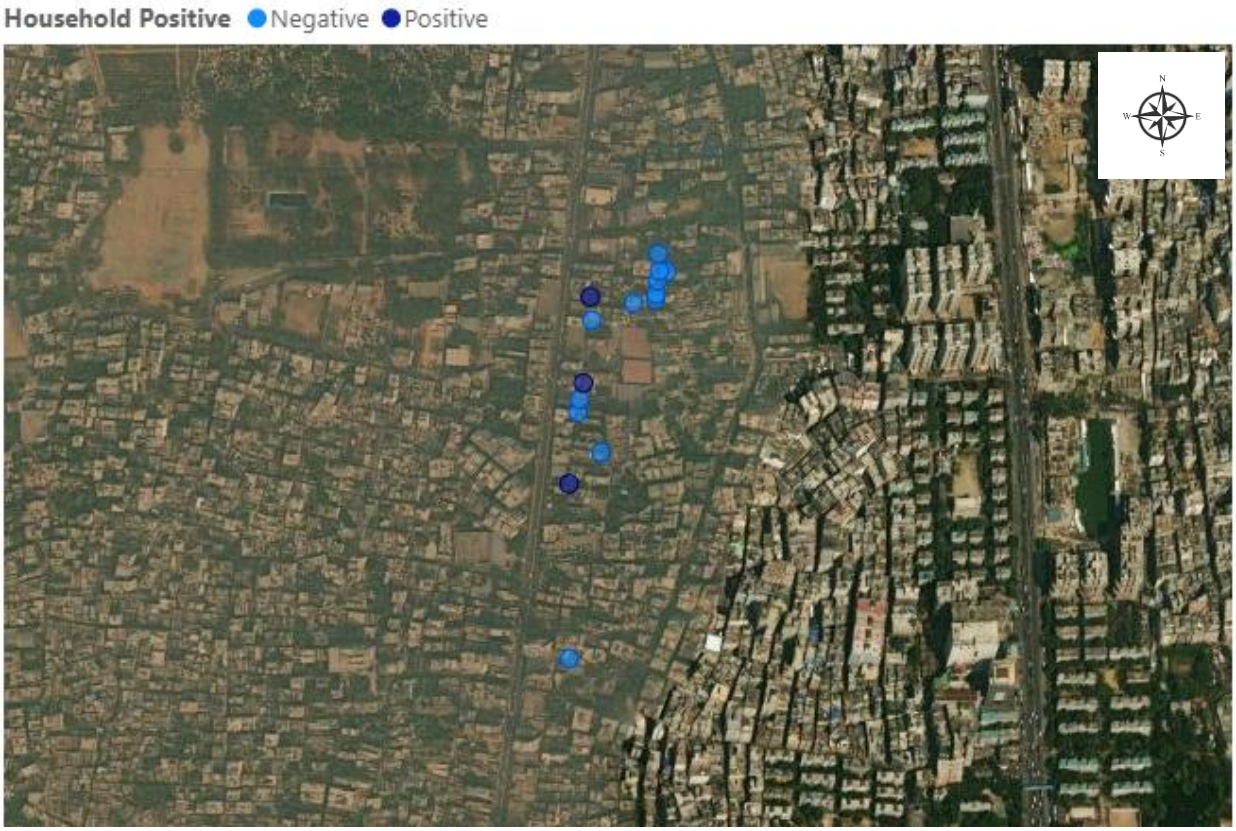
Map 1: Positive and Negative House of Uttara 4 No. Sector at Weeks 101



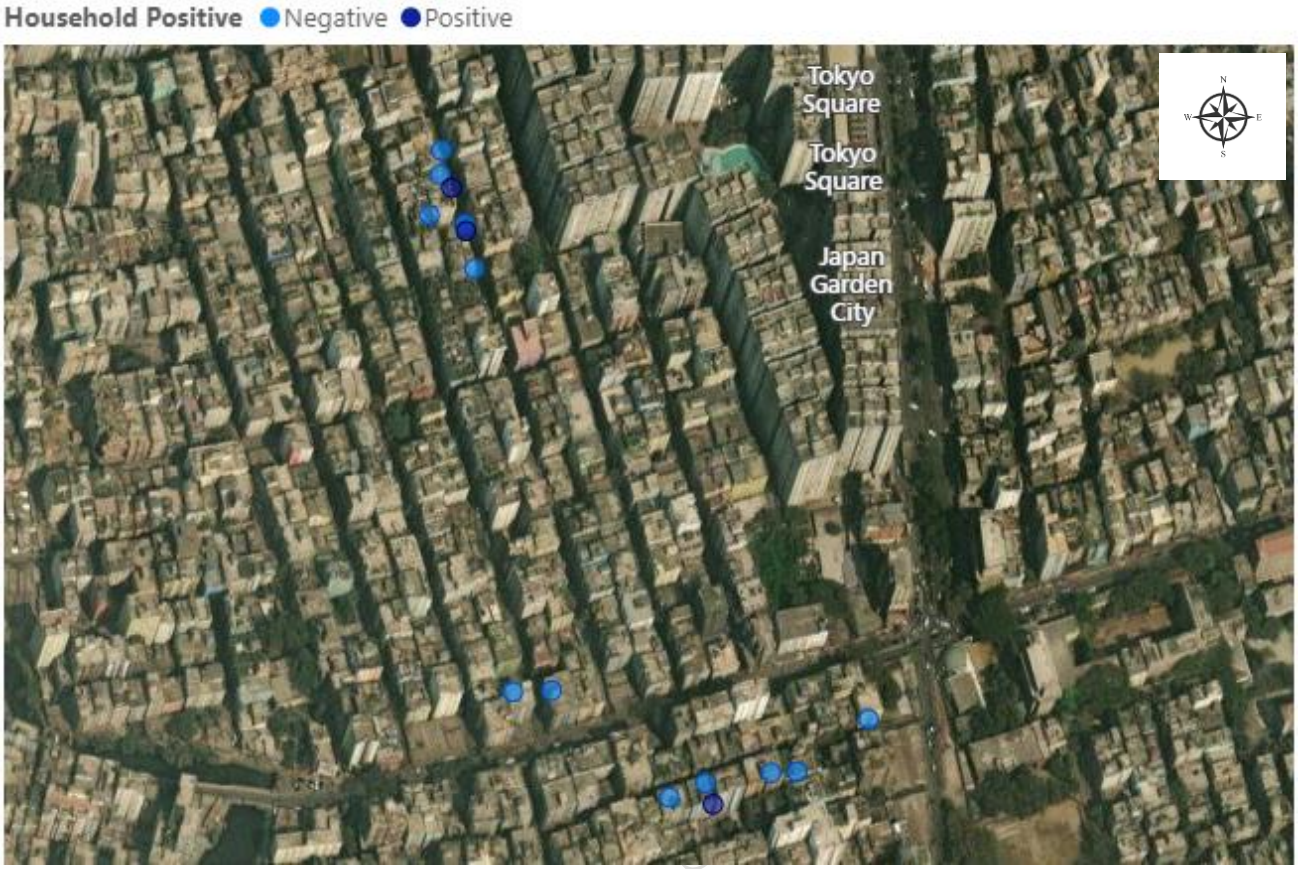
Map 2: Positive and Negative House of Mirpur 2 at Weeks 101



Map 3: Positive and Negative House of Gulshan 1 at Weeks 101



Map 4: Positive and Negative House of Mirpur 1 at Weeks 101



Map 5: Positive and Negative House of Mohammadpur at Weeks 101

Table 5: Positive House, Wet Container, BI, CI and HI in Zones (1-5) in Week 101 (May 1-5, 2026)

Zone	Total House	Positive House	Total Wet container	Positive Wet Container	BI	CI	HI
1	15	7	39	8	53.33	20.51	46.67
2	15	2	27	2	13.33	7.41	13.33
3	15	1	28	1	6.67	3.57	6.67
4	15	3	32	6	40.00	18.75	20.00
5	15	3	23	3	20.00	13.04	20.00

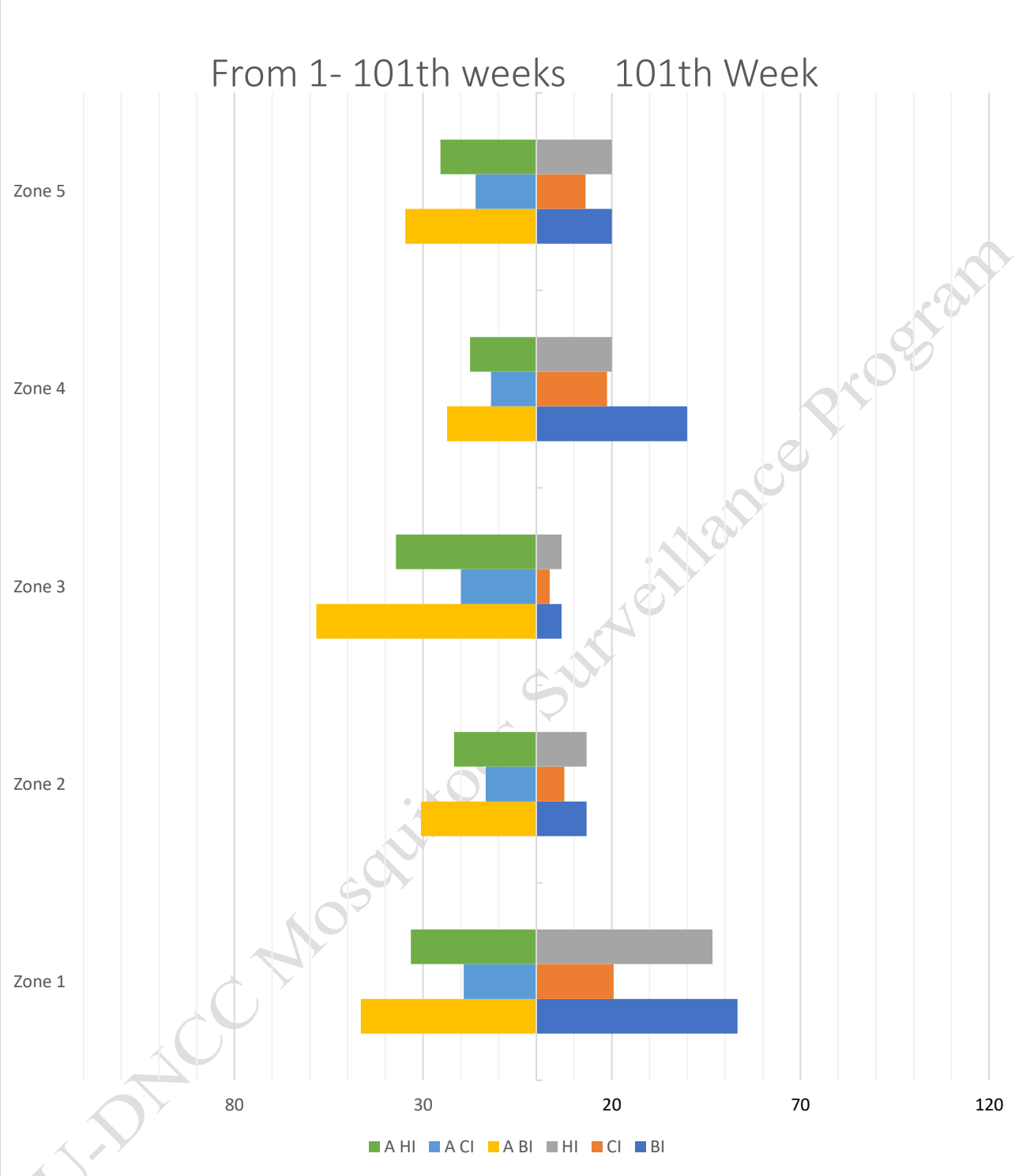


Fig. 6: BI, CI and HI in Different Zones (1-5) of Dhaka north City Corporation

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

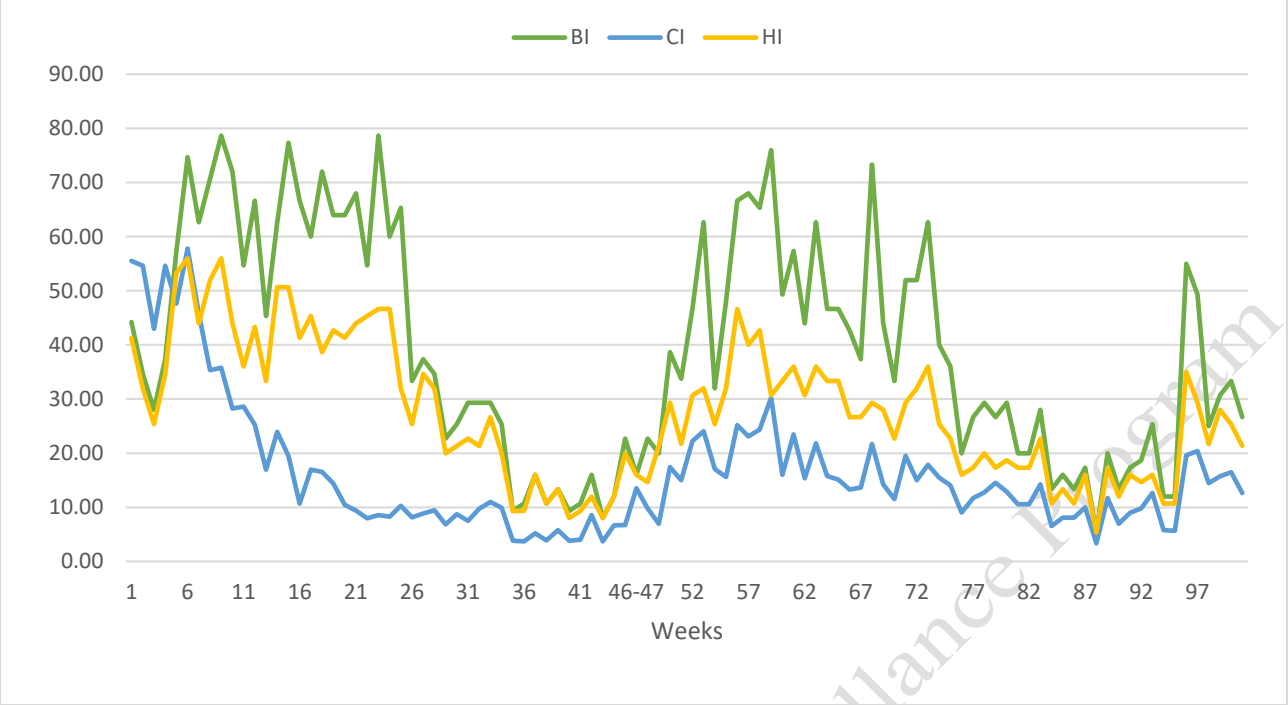


Fig 7: Mosquitoes population fluctuation (BI, CI, HI) from Week 1 to Week 101 (May 2, 2024 - May 5, 2026)

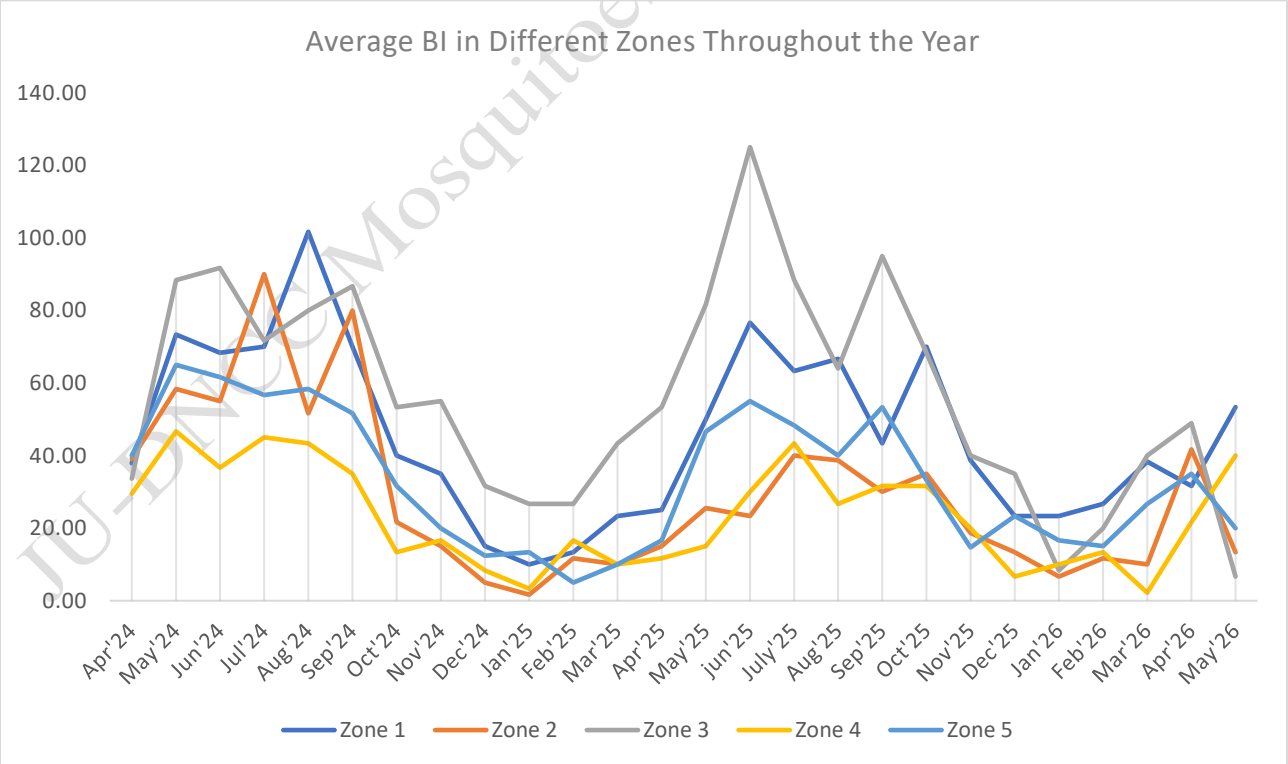


Fig. 8: Breteau Index (BI) in Different Zones from Week 1 to Week 101 (May 2, 2024 - May 5, 2026)

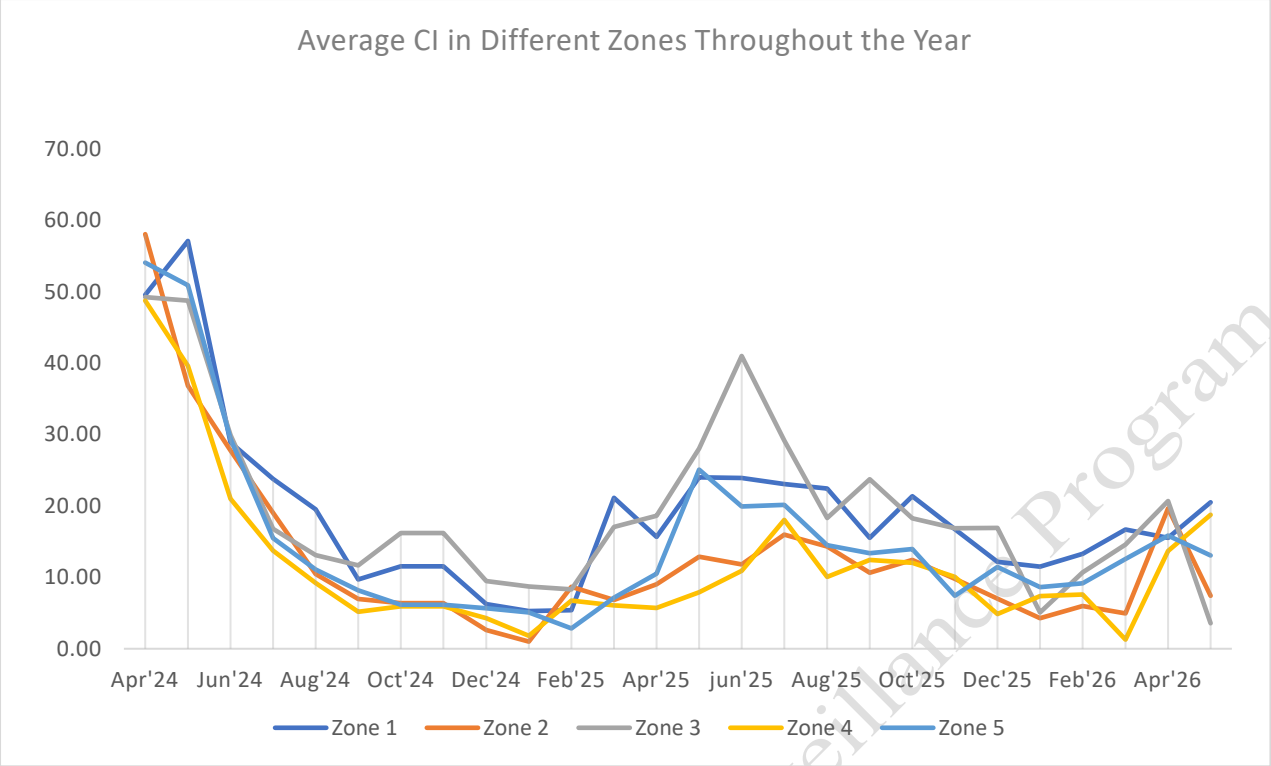


Fig. 9: Container Index (CI) in Different Zones from Week 1 to Week 101 (May 2, 2024 - May 5, 2026)

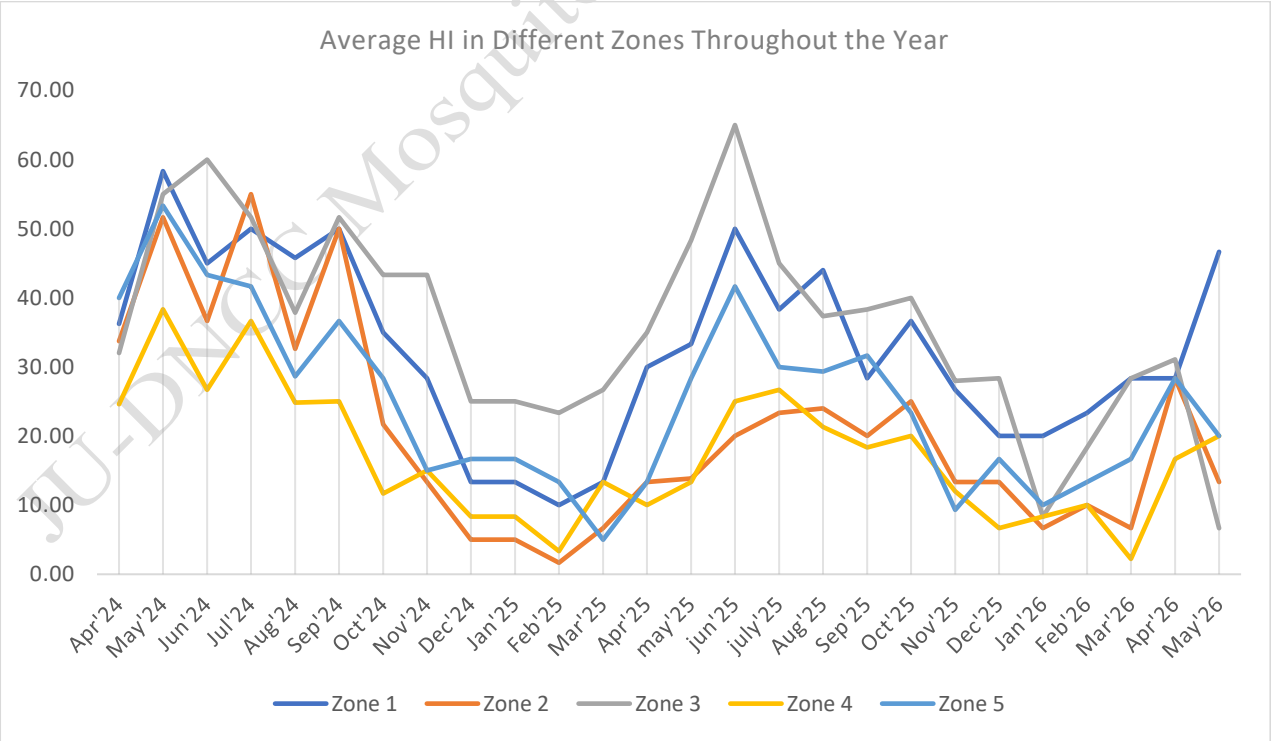


Fig. 10: House Index (HI) in Different Zones from Week 1 to Week 101 (May 2, 2024 - May 5, 2026)

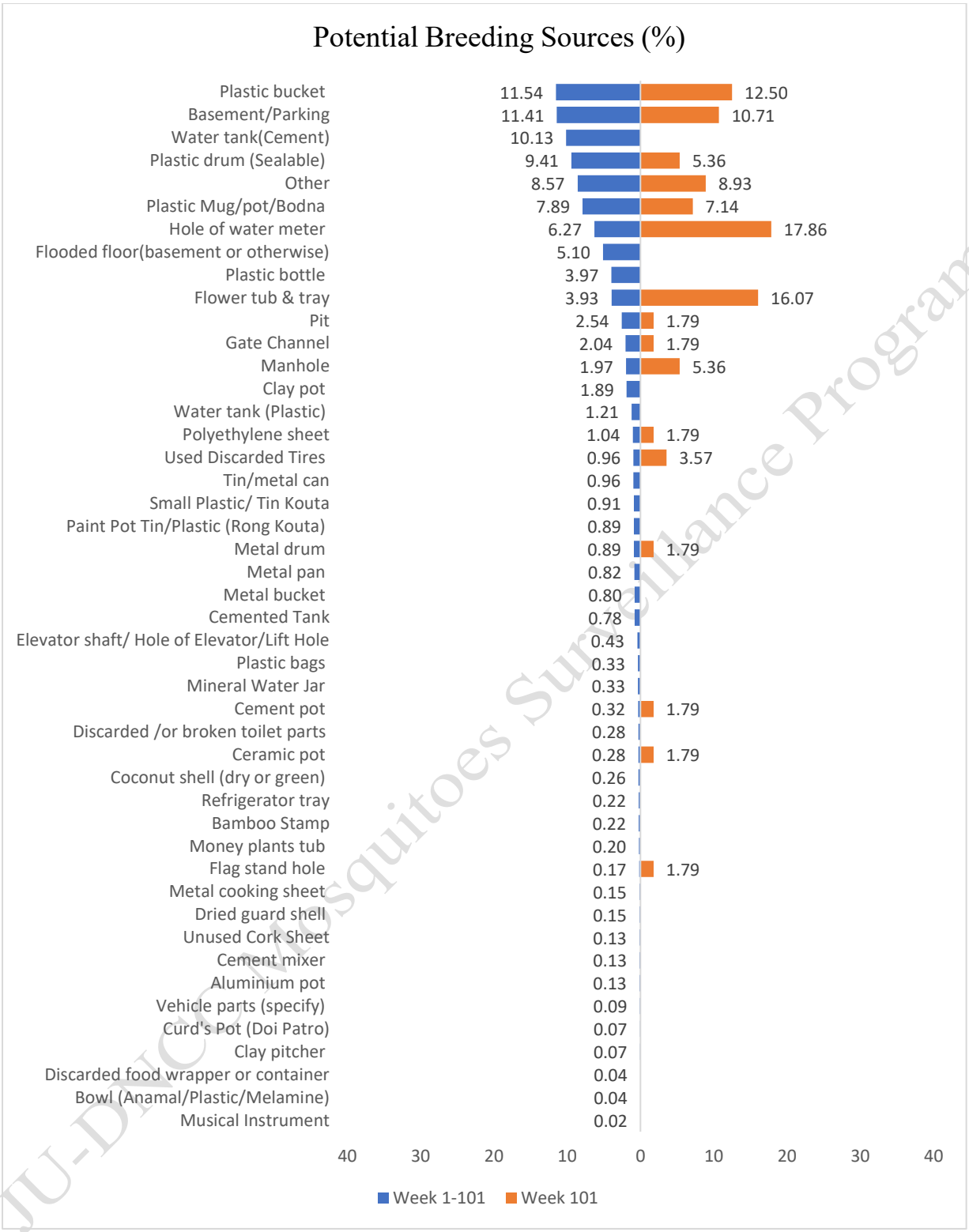


Fig. 11: Container Frequency for *Aedes* mosquitoes in Zones (1-5)

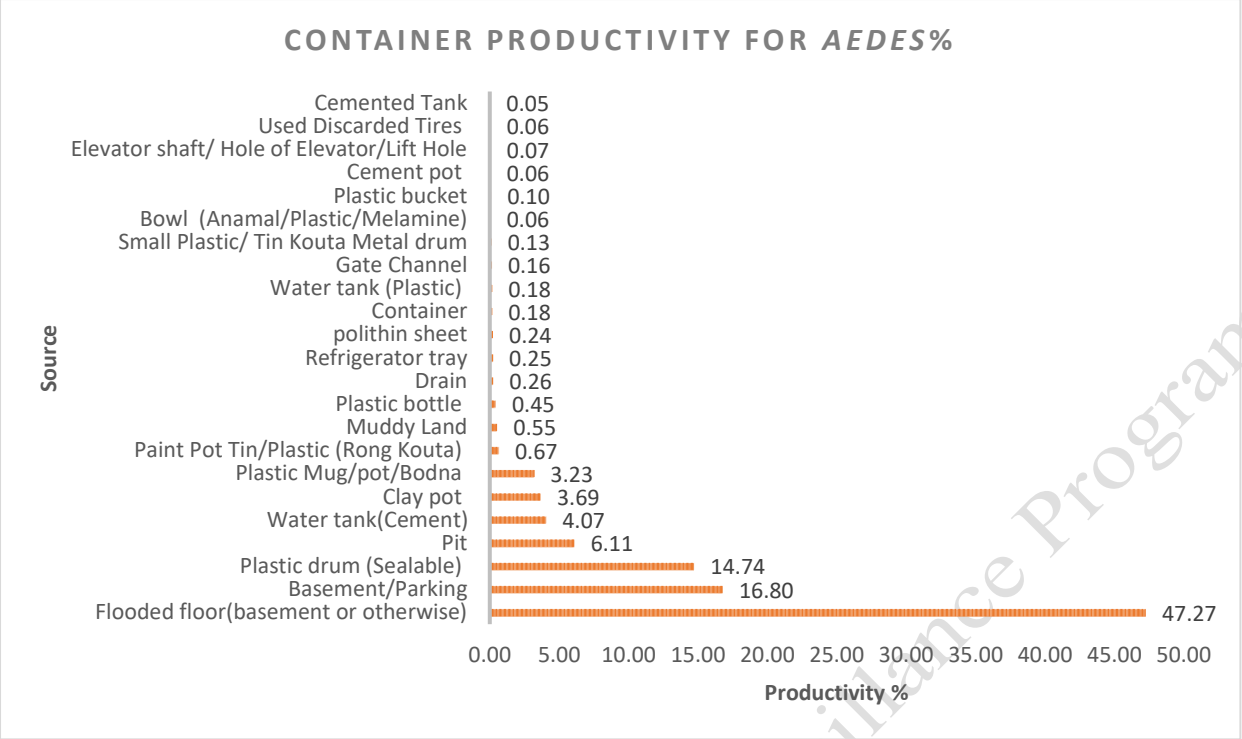


Fig. 12: Container Productivity of *Aedes* mosquito in DNCC from Week 1 to Week 101 (May 2, 2024 - May 5, 2026)

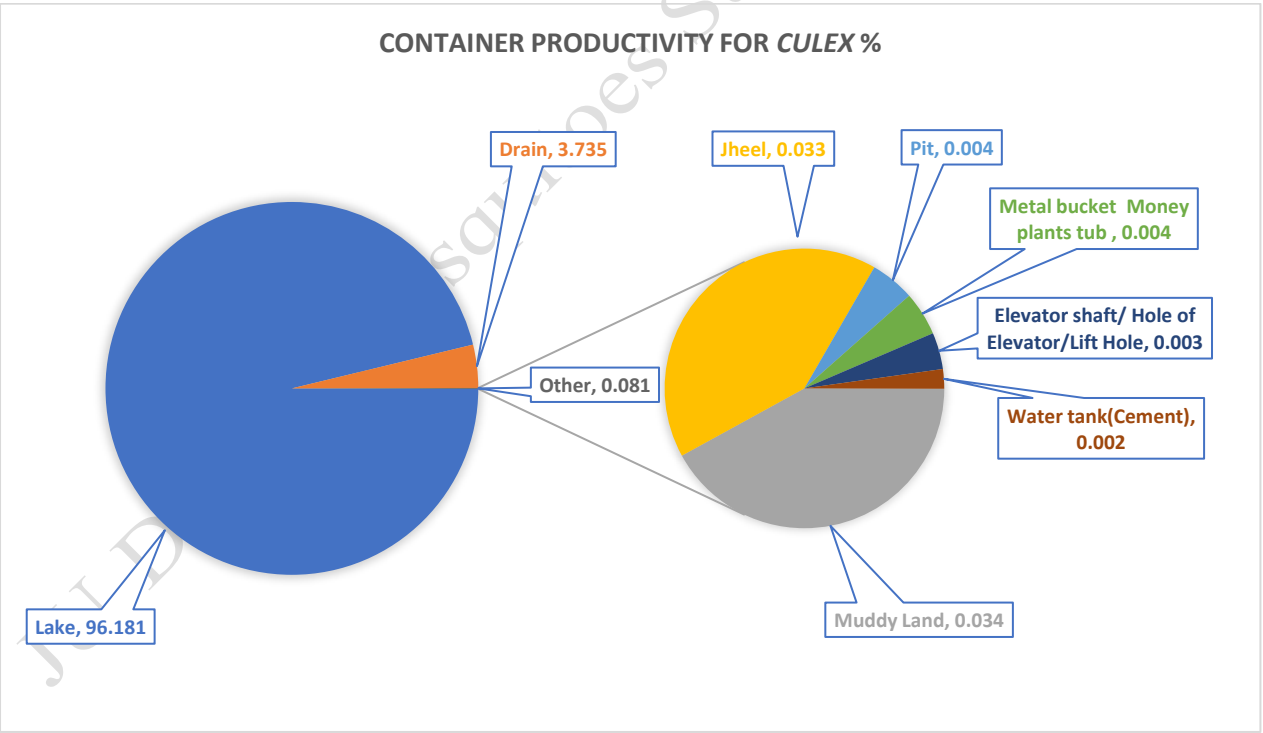


Fig. 13: Container Productivity of *Culex* mosquito in DNCC, from Week 1 to Week 101 (May 2, 2024 - May 5, 2026)

Table 6: Container Frequency & Probable potential Wet Container in zones (1-5) from Week 1 to Week 101 (May 2, 2024 - May 5, 2026)

Sources	+House	-WC	+WC	**Total WC**	% WC	% PWC
Plastic bucket	211	265	357	622	11.54	6.62
Basement/Parking	225	46	569	615	11.41	10.56
Water tank(Cement)	169	252	294	546	10.13	5.46
Plastic drum (Sealable)	236	79	428	507	9.41	7.94
Other	226	133	329	462	8.57	6.11
Plastic Mug/pot/Bodna	174	84	341	425	7.89	6.33
Hole of water meter	63	13	325	338	6.27	6.03
Flooded floor(basement or otherwise)	128	138	137	275	5.10	2.54
Plastic bottle	80	63	151	214	3.97	2.80
Flower tub & tray	78	28	184	212	3.93	3.41
Pit	66	23	114	137	2.54	2.12
Gate Channel	33	34	76	110	2.04	1.41
Manhole	57	30	76	106	1.97	1.41
Clay pot	83	11	91	102	1.89	1.69
Water tank (Plastic)	20	28	37	65	1.21	0.69
Polyethylene sheet	35	3	53	56	1.04	0.98
Tin/metal can	30	0	52	52	0.96	0.96
Used Discarded Tires	30	17	35	52	0.96	0.65
Small Plastic/ Tin Kouta	24	9	40	49	0.91	0.74
Metal drum	19	8	40	48	0.89	0.74
Paint Pot Tin/Plastic (Rong Kouta)	30	5	43	48	0.89	0.80
Metal pan	18	3	41	44	0.82	0.76
Metal bucket	21	5	38	43	0.80	0.71
Cemented Tank	22	13	29	42	0.78	0.54
Elevator shaft/ Hole of Elevator/Lift Hole	8	4	19	23	0.43	0.35
Mineral Water Jar	6	4	14	18	0.33	0.26
Plastic bags	8	1	17	18	0.33	0.32
Cement pot	11	2	15	17	0.32	0.28
Ceramic pot	13	0	15	15	0.28	0.28
Discarded /or broken toilet parts	12	2	13	15	0.28	0.24
Coconut shell (dry or green)	4	0	14	14	0.26	0.26
Bamboo Stamp	9	0	12	12	0.22	0.22
Refrigerator tray	9	0	12	12	0.22	0.22
Money plants tub	8	0	11	11	0.20	0.20
Flag stand hole	5	1	8	9	0.17	0.15
Dried guard shell	5	0	8	8	0.15	0.15
Metal cooking sheet	2	0	8	8	0.15	0.15
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	0.07
Clay pitcher	3	1	3	4	0.07	0.06
Curd's Pot (Doi Patro)	3	0	4	4	0.07	0.07
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 101 (May 2, 2024 - May 5, 2026)

Containers	Percentage of Breeding Sources				
	Zone 01	Zone 02	Zone 03	Zone 04	Zone 05
Plastic bucket	1.99	2.04	2.23	2.86	2.43
Basement/Parking	2.89	1.74	2.97	1.09	2.71
Water tank(Cement)	1.30	1.65	1.32	2.95	2.91
Plastic drum (Sealable)	1.34	2.28	1.63	2.19	1.97
Other	2.78	1.48	2.36	0.69	1.26
Plastic Mug/pot/Bodna	1.39	1.43	1.48	2.21	1.37
Hole of water meter	0.74	1.21	0.30	2.04	1.99
Flooded floor(basement or otherwise)	1.32	1.13	0.85	0.56	1.24
Plastic bottle	0.52	0.93	0.58	1.04	0.91
Flower tub & tray	1.15	0.58	1.32	0.58	0.32
Pit	0.65	0.37	0.84	0.32	0.37
Gate Channel	0.80	0.19	0.58	0.07	0.41
Manhole	0.78	0.22	0.65	0.20	0.11
Clay pot	0.24	0.39	0.58	0.22	0.46
Water tank (Plastic)	0.00	0.76	0.17	0.15	0.13
Polyethylene sheet	0.30	0.28	0.20	0.19	0.07
Tin/metal can	0.28	0.26	0.19	0.19	0.06
Used Discarded Tires	0.37	0.28	0.17	0.07	0.07
Small Plastic/ Tin Kouta	0.24	0.17	0.26	0.11	0.13
Metal drum	0.17	0.11	0.20	0.28	0.13
Paint Pot Tin/Plastic (Rong Kouta)	0.20	0.09	0.26	0.20	0.13
Metal pan	0.17	0.17	0.26	0.09	0.13
Metal bucket	0.11	0.07	0.22	0.24	0.15
Cemented Tank	0.15	0.11	0.19	0.22	0.11
Elevator shaft/ Hole of Elevator/Lift Hole	0.19	0.09	0.07	0.00	0.07
Mineral Water Jar	0.04	0.02	0.06	0.15	0.07
Plastic bags	0.04	0.02	0.07	0.11	0.09
Cement pot	0.06	0.00	0.11	0.02	0.13
Ceramic pot	0.07	0.02	0.06	0.02	0.11
Discarded /or broken toilet parts	0.02	0.13	0.04	0.00	0.09
Coconut shell (dry or green)	0.06	0.07	0.06	0.04	0.04
Bamboo Stamp	0.06	0.07	0.04	0.06	0.00
Refrigerator tray	0.07	0.04	0.06	0.04	0.02
Money plants tub	0.06	0.04	0.06	0.00	0.06
Flag stand hole	0.09	0.02	0.02	0.00	0.04
Dried guard shell	0.04	0.02	0.07	0.00	0.02
Metal cooking sheet	0.00	0.02	0.06	0.04	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

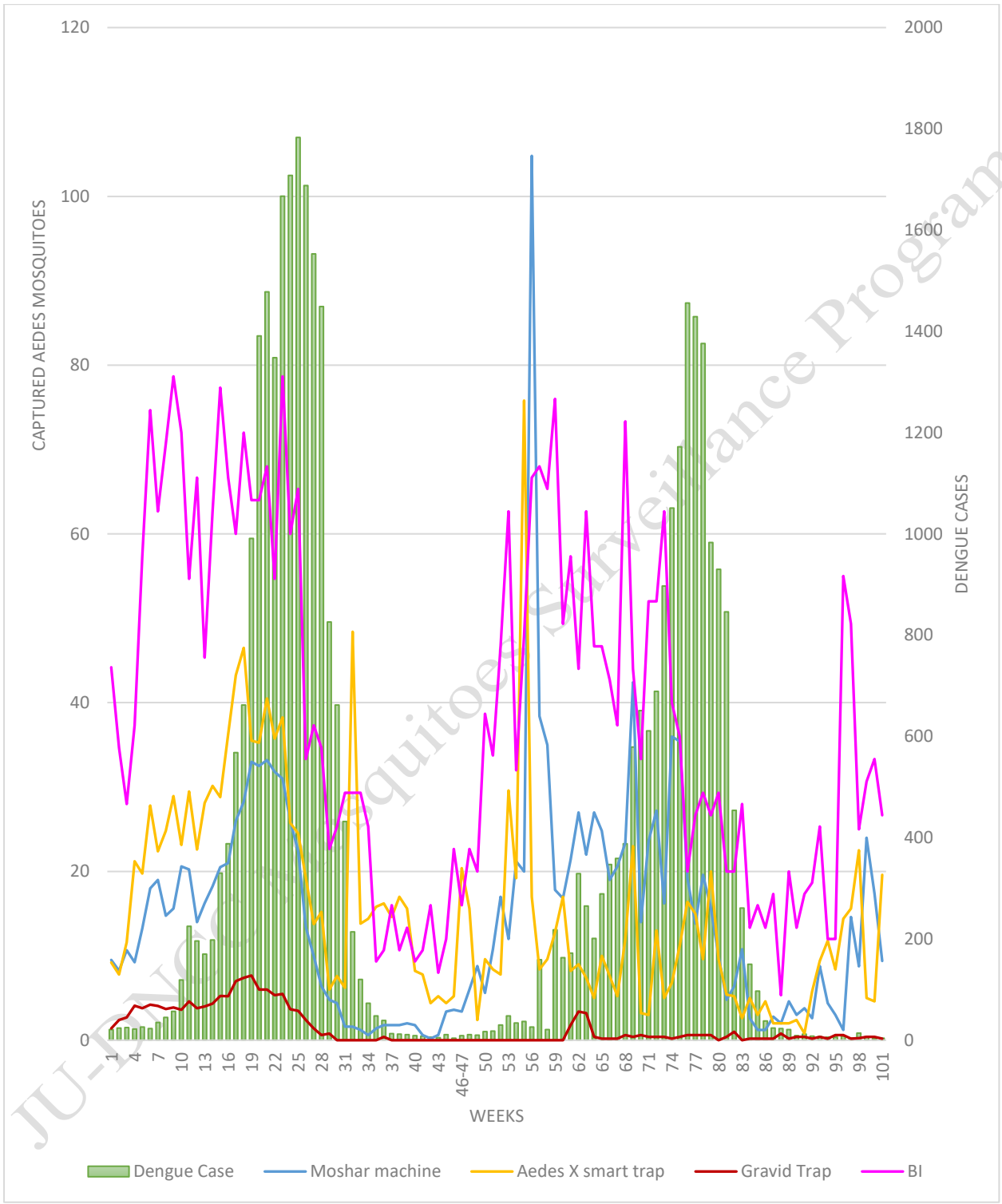


Fig. 14: Correlation between Dengue Cases and *Aedes* Mosquitoes Captured by per Moshar Machine CO_2 traps, Aedes X smart traps, and Gravid traps

NB: DNCC dengue cases only

Photographs of Mosquitoes Surveillance

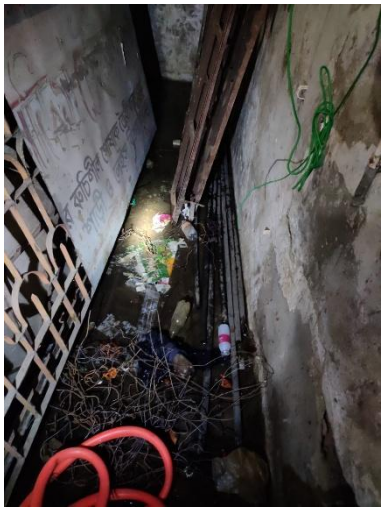
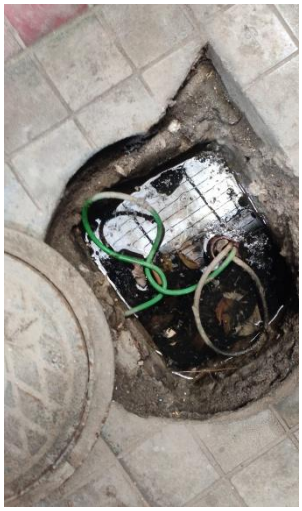




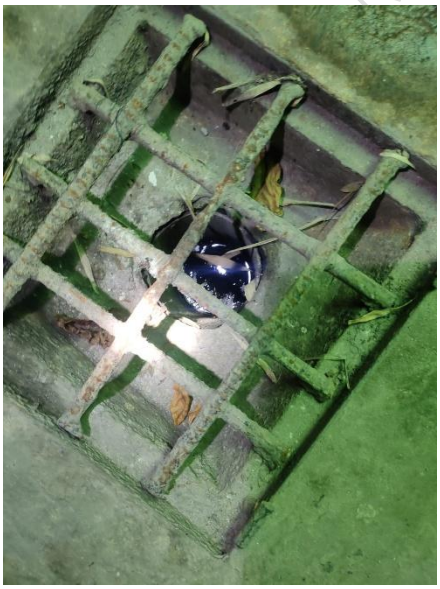




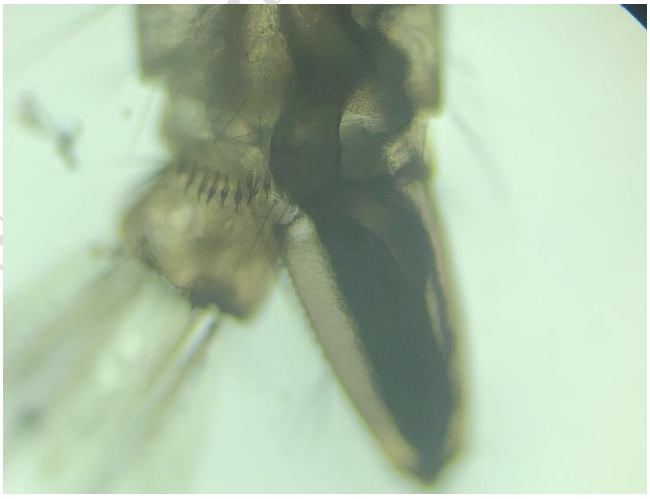
Samples Collection from Field



Samples Processing and Identification



Comments:

The mosquito density is decreasing and the dengue cases declining rapidly. The Breteau Index (BI) is decreased in week 101. 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
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