Weekly Report on

JU-DNCC Mosquitoes Surveillance Program

Week 102 (May 8-13, 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.

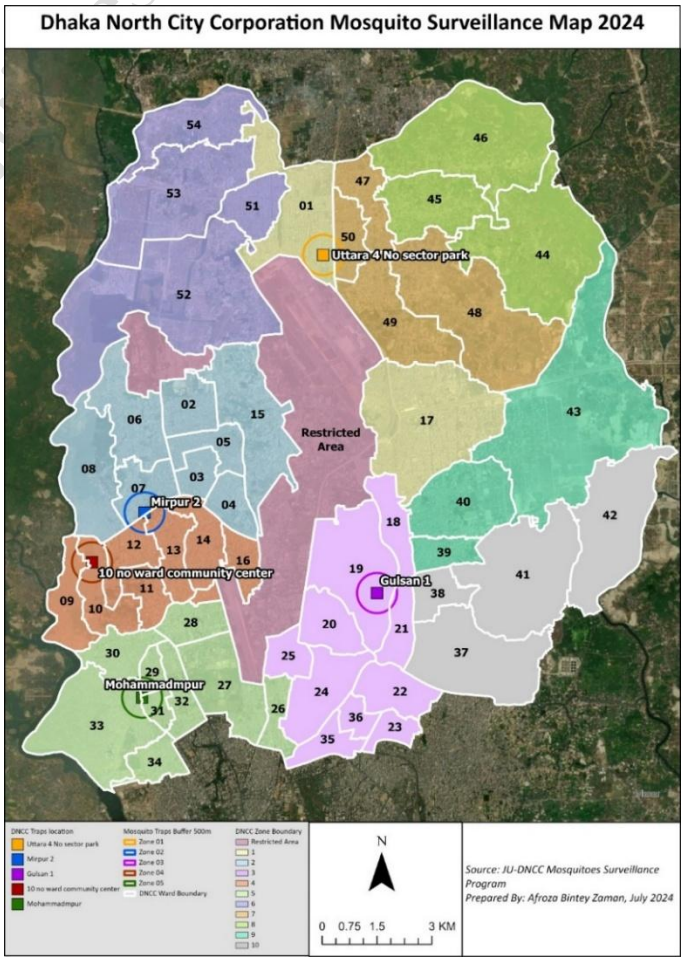
Zone	Traps Location	GPS Location
01	Uttara-4 No sector park	23.8613672,90.4035528
02	Mirpur-2, Vander office, DNCC	23.8036248,90.3601995
03	Gulsan 1, Purantan Vander office	23.7860557,90.4164024
04	10 No ward community center, Mirpur-1	23.7922967,90.3467992
05	Mohammadpur regional office of DNCC	23.7618721,90.3590884

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 102 (May 8-13, 2026)

Zone	N	*Ae. aegypti*	*Ae. albopictus*	*Cx. quinquefasciatus*	*Cx. tritaeniorhynchus*	*Ar. subalbatus*	*An. vagus*	*An. subpictus*	*An. annularis*
1	5849	6	2	4425	1295	116	1	0	4
2	673	2	0	466	196	7	0	2	0
3	1363	2	1	848	512	0	0	0	0
4	1929	8	3	1075	765	70	0	8	0
5	5069	7	2	1450	3590	20	0	0	0
Total	14883	25	8	8264	6358	213	1	10	4
%	100.00	0.17	0.05	55.53	42.72	1.43	0.01	0.07	0.03

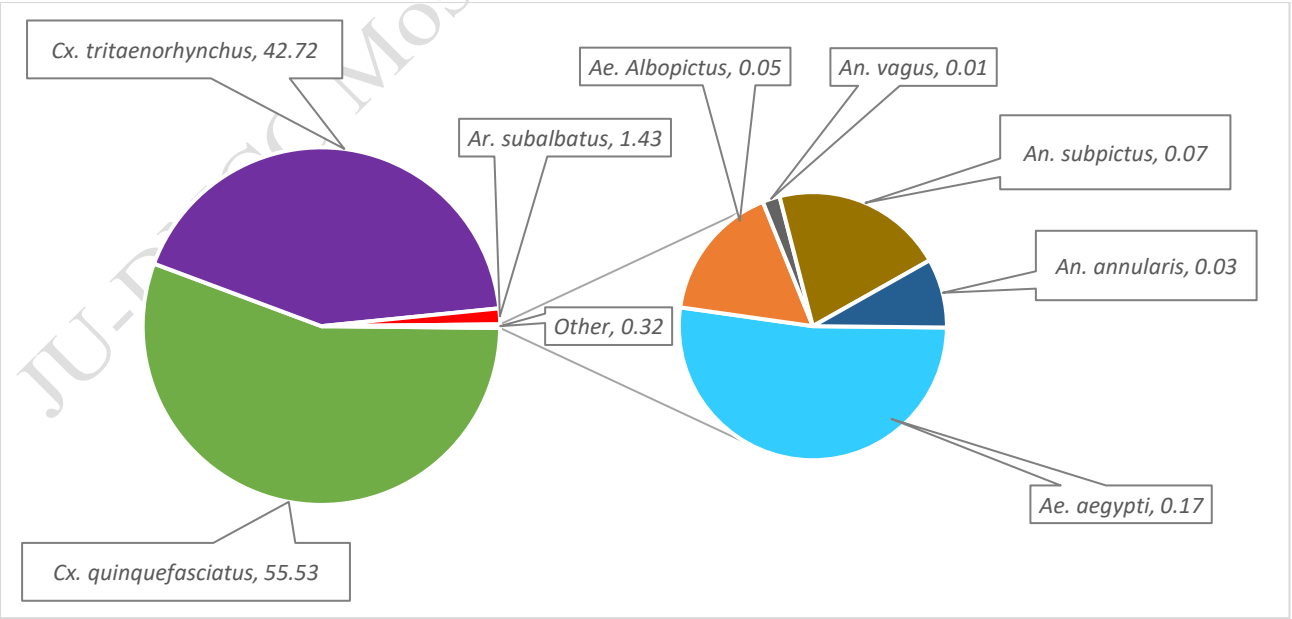


Fig. 1: Percentage of Adult Mosquitoes Collected by Moshar Machine (CO_2) traps in Week 102 (May 8-13, 2026)

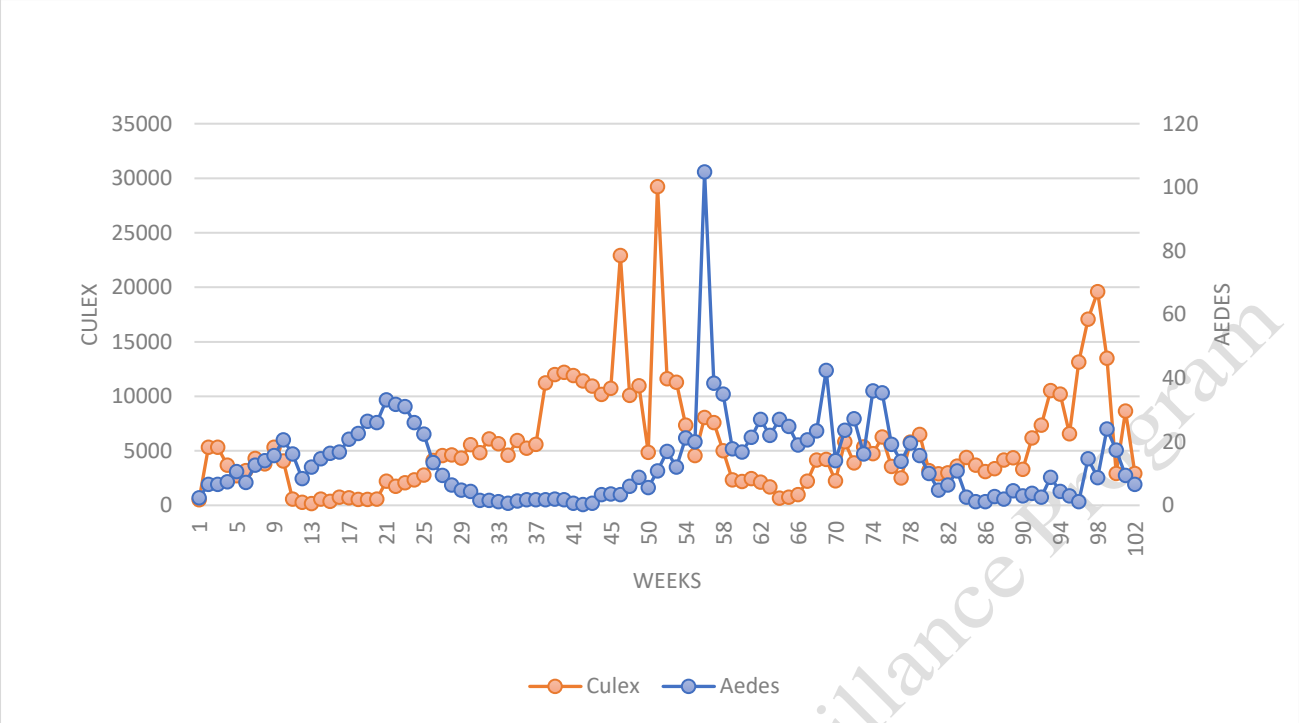


Fig 2: Average number of mosquitoes per Moshar Machine (CO_2) traps from Week 1 to Week 102 (May 2, 2024 - May 13, 2026)

Table 2. Collected Mosquito Larvae from *Aedes* X smart Traps in Week 102 (May 8-13, 2026)

Zone	N	*Ae. aegypti*	*Ae. albopictus*
1	11	11	0
2	3	3	0
3	2	2	0
4	4	4	0
5	4	4	0
Total	24	24	0
(%)	100	100.00	0.00

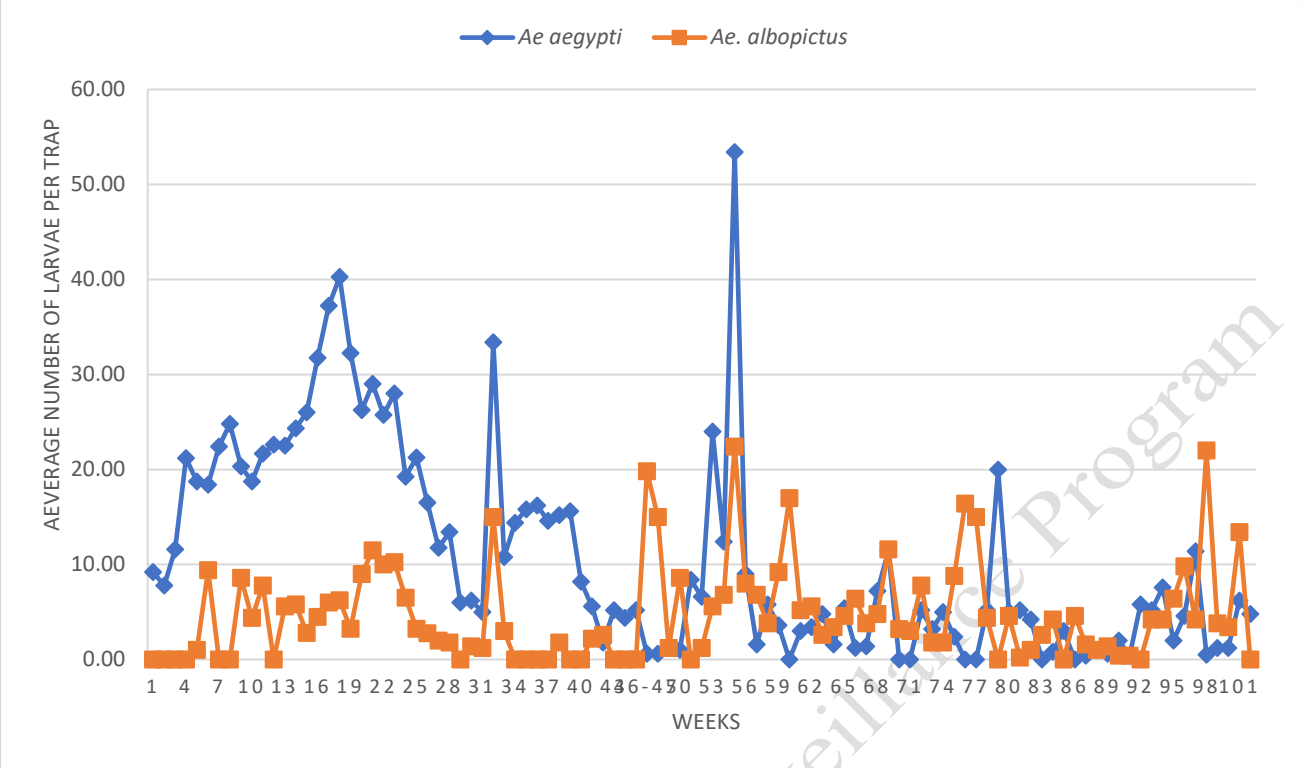


Fig 3: Average Number of *Aedes* Larvae per *Aedes* X Smart Trap in Zones 1-5 from Week 1 to Week 102 (May 2, 2024 - May 13, 2026)

Table 3. Collected Adult Mosquitoes from Gravid Trap in Week 102 (May 8-13, 2026)

Zone	Number of Mosquitoes	*Ae. aegypti*	*Ae. albopictus*	*Cx. quinquefasciatus*
1	2	0	0	2
2	2	0	1	1
3	0	0	0	0
4	1	0	0	1
5	2	1	0	1
Total	7	1	1	5
(%)	100	14.29	14.29	71.43

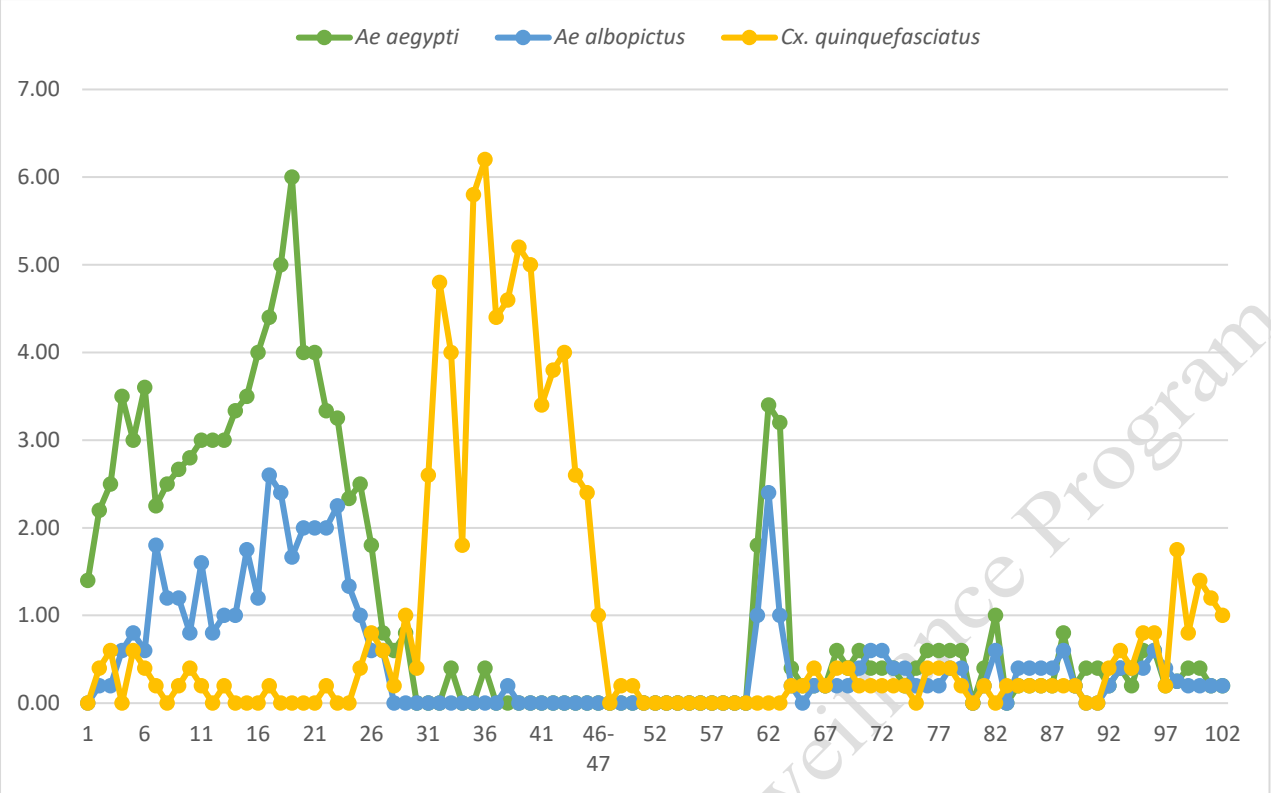


Fig 4: Average number of adult mosquitoes per Gravid trap in zones 1-5 from Week 1 to Week 102 (May 2, 2024 - May 13, 2026)

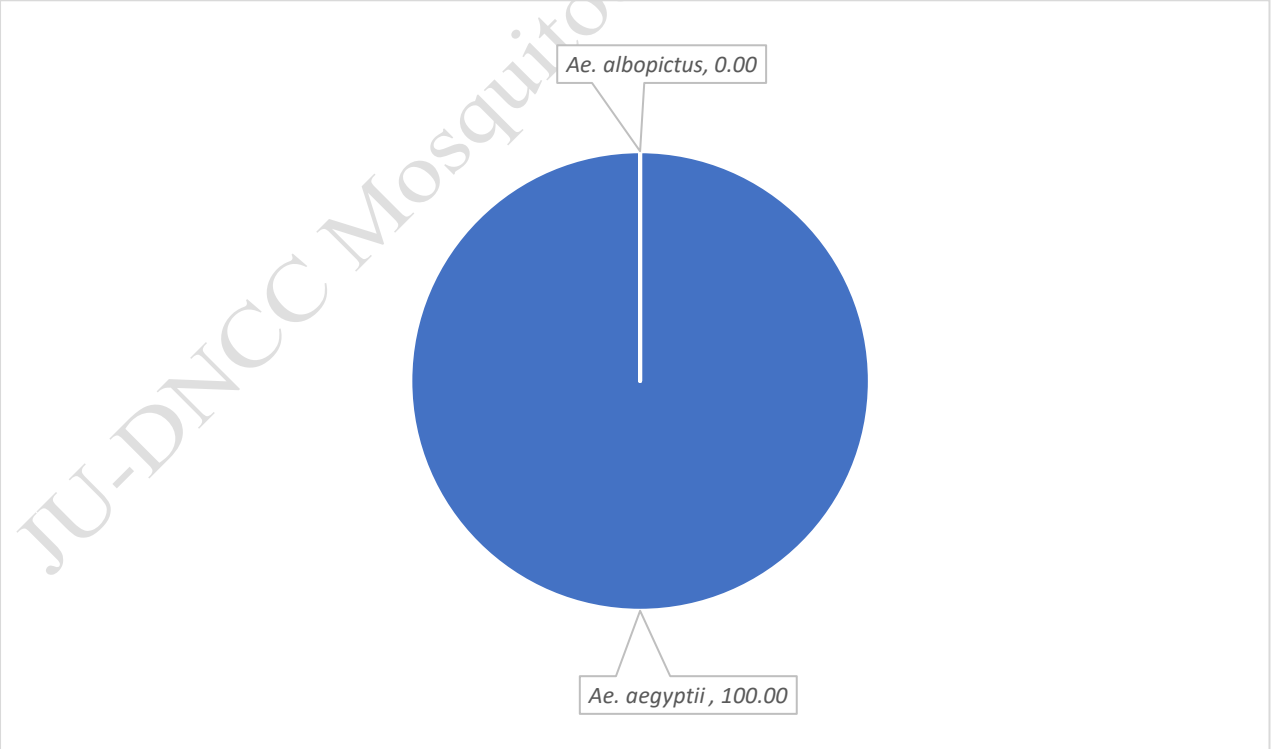
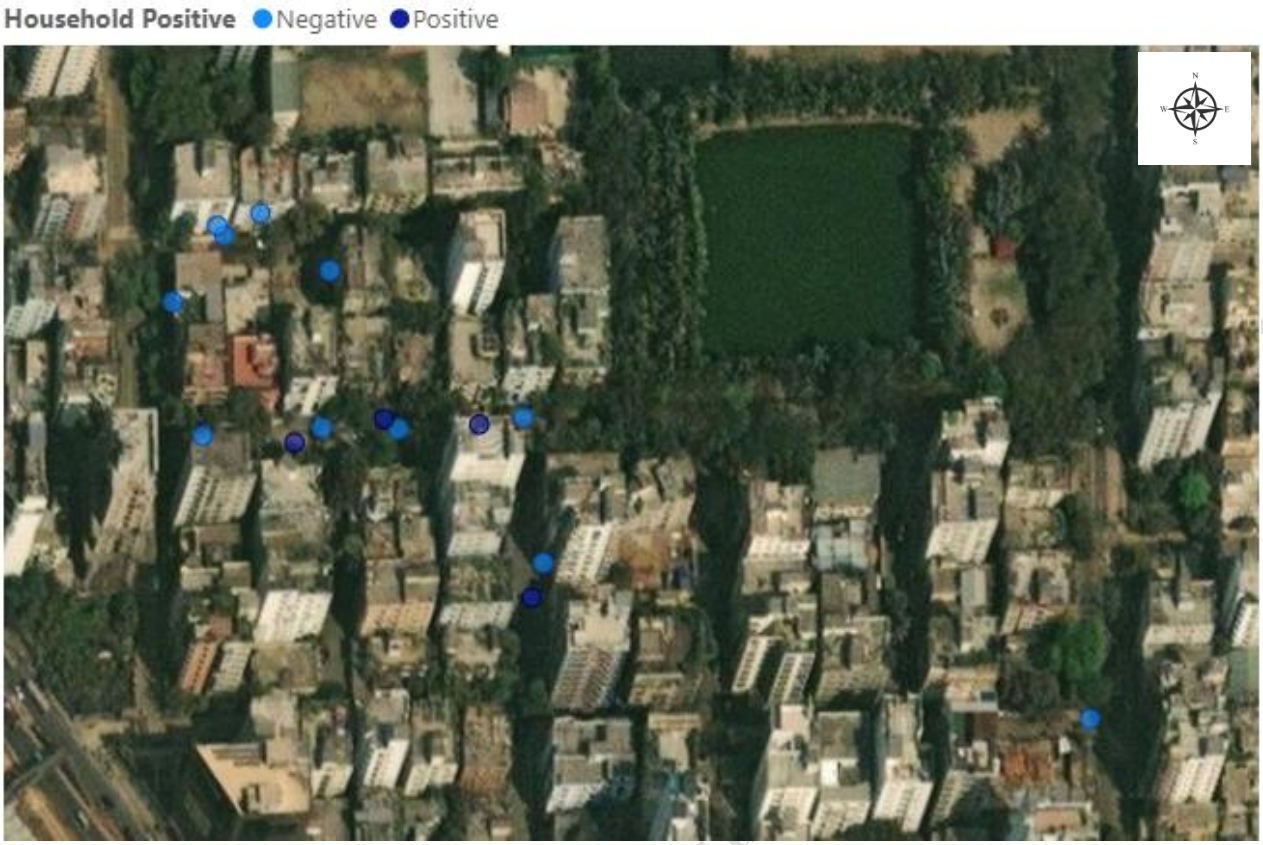


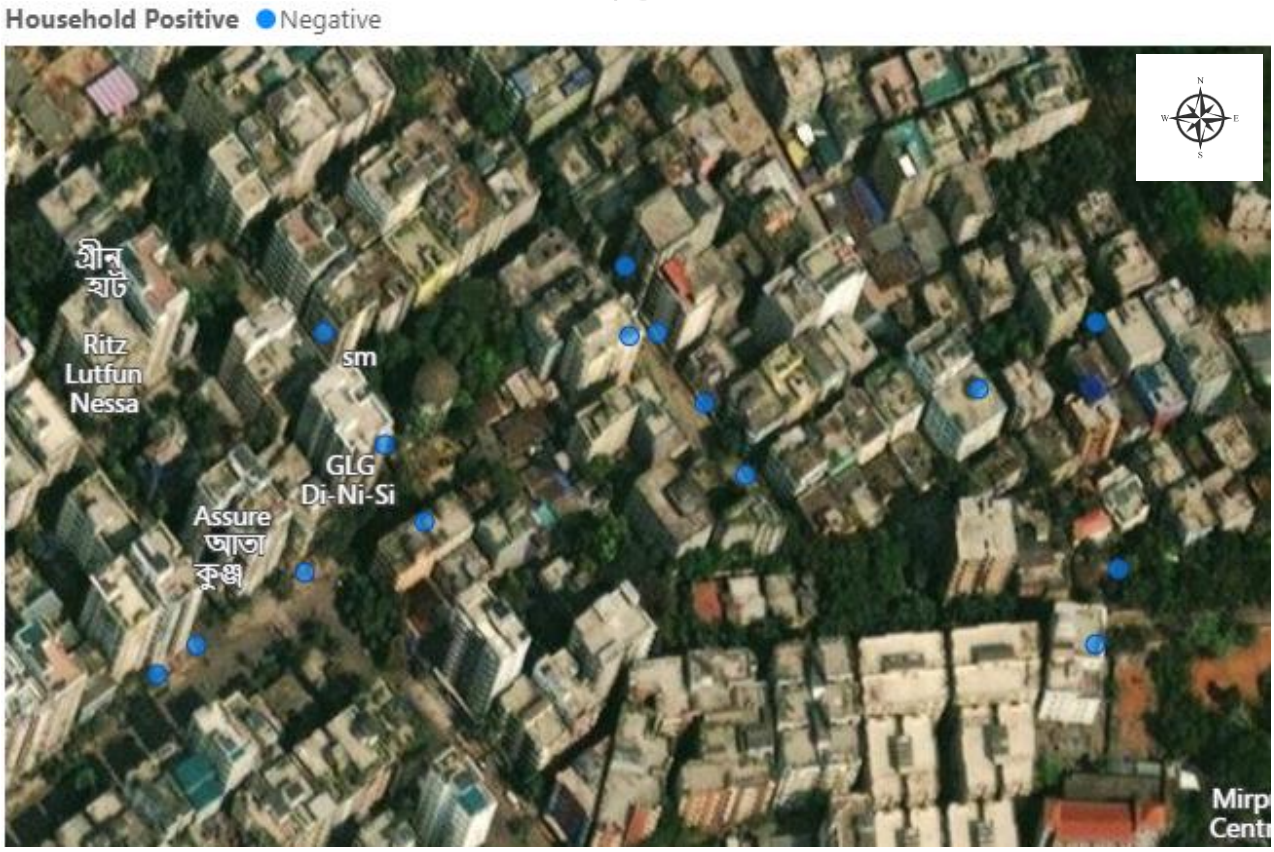
Fig. 5: Percentage of Mosquito Larvae from Zones (1-5) in Week 102 (May 8-13, 2026)

Table 4. Positive Larval Spots in Different Zones (1-5) with Estimated Number of Larvae in Week 102 (May 8-13, 2026)

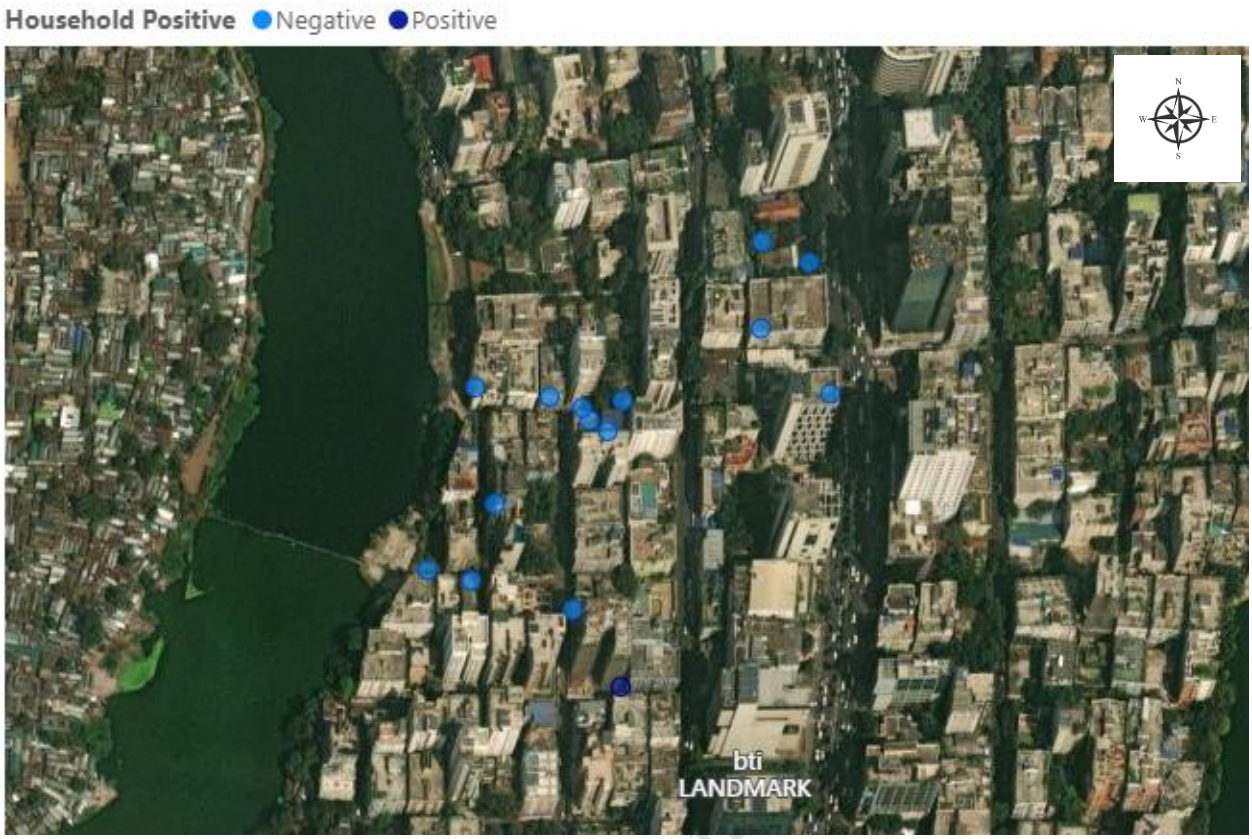
Zone	GPS Location	*Ae. aegypti*	*Ae. albopictus*	*Cx. quinquefasciatus*	*Source*
1	23.8599488 90.4022104	7	0	0	Plastic Mug/pot/Bodna
	23.8600083 90.4024587	10	0	0	Plastic bucket
	23.8599947 90.4027234	40	0	0	Flower tub & tray
	23.859555 90.4028681	15	0	0	Plastic Mug/pot/Bodna
	Total	72	0	0	
3	23.7834254 90.4157239	452	0	0	Pit
	Total	452	0	0	
4	23.7886724 90.3475309	8	0	0	Basement/Parking
	23.7889499 90.3476192	29	0	0	Flower tub & tray
	Total	37	0	0	
5	23.7633404 90.3547019	45	0	0	Plastic bucket
	23.76319 90.3543801	26	0	0	Water tank (Plastic)
	23.7632193 90.3543378	248	0	0	Hole of water meter
	23.7631576 90.354141	45	0	0	Hole of water meter
	23.7631874 90.3538161	25	0	0	Clay pot
	23.7630658 90.3529168	25	0	0	Basement/Parking
	Total	414	0	0	
Grand Total		975	0	0	



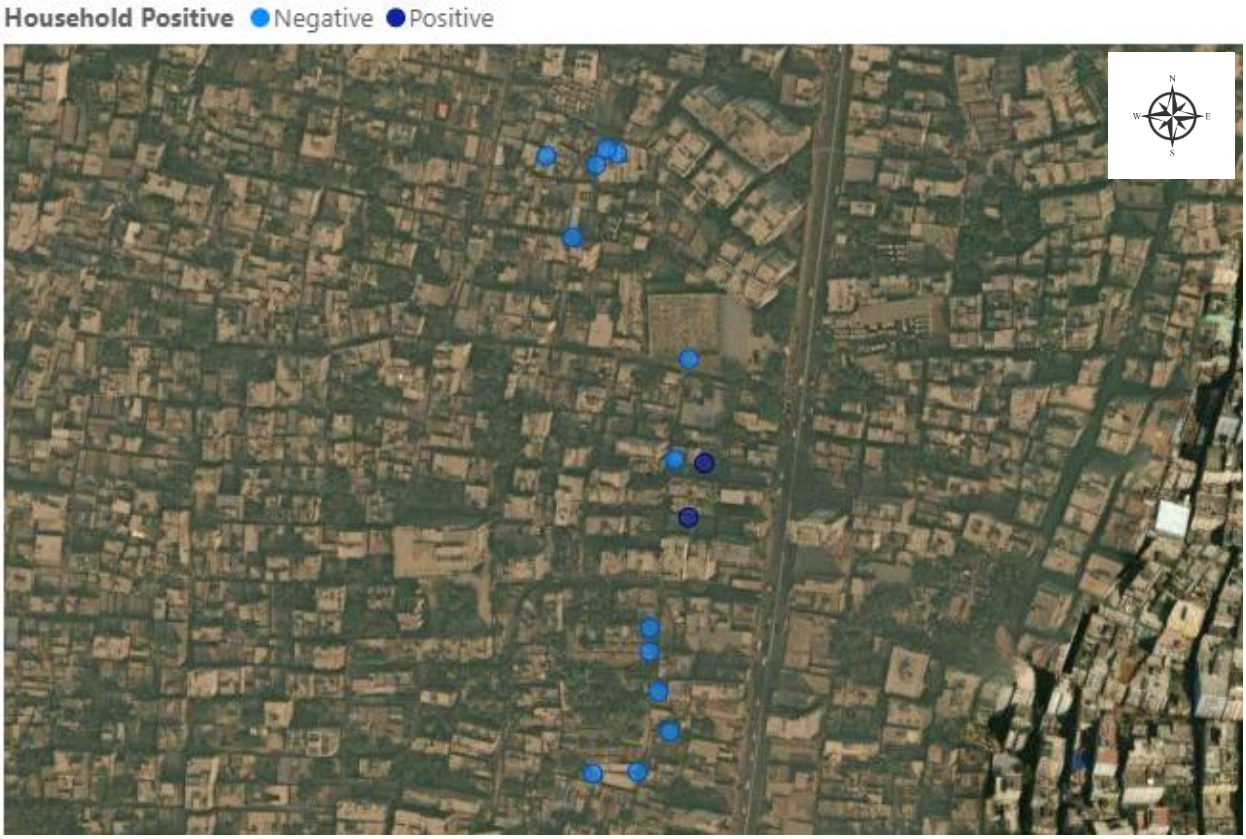
Map 1: Positive and Negative House of Uttara 4 No. Sector at Weeks 102



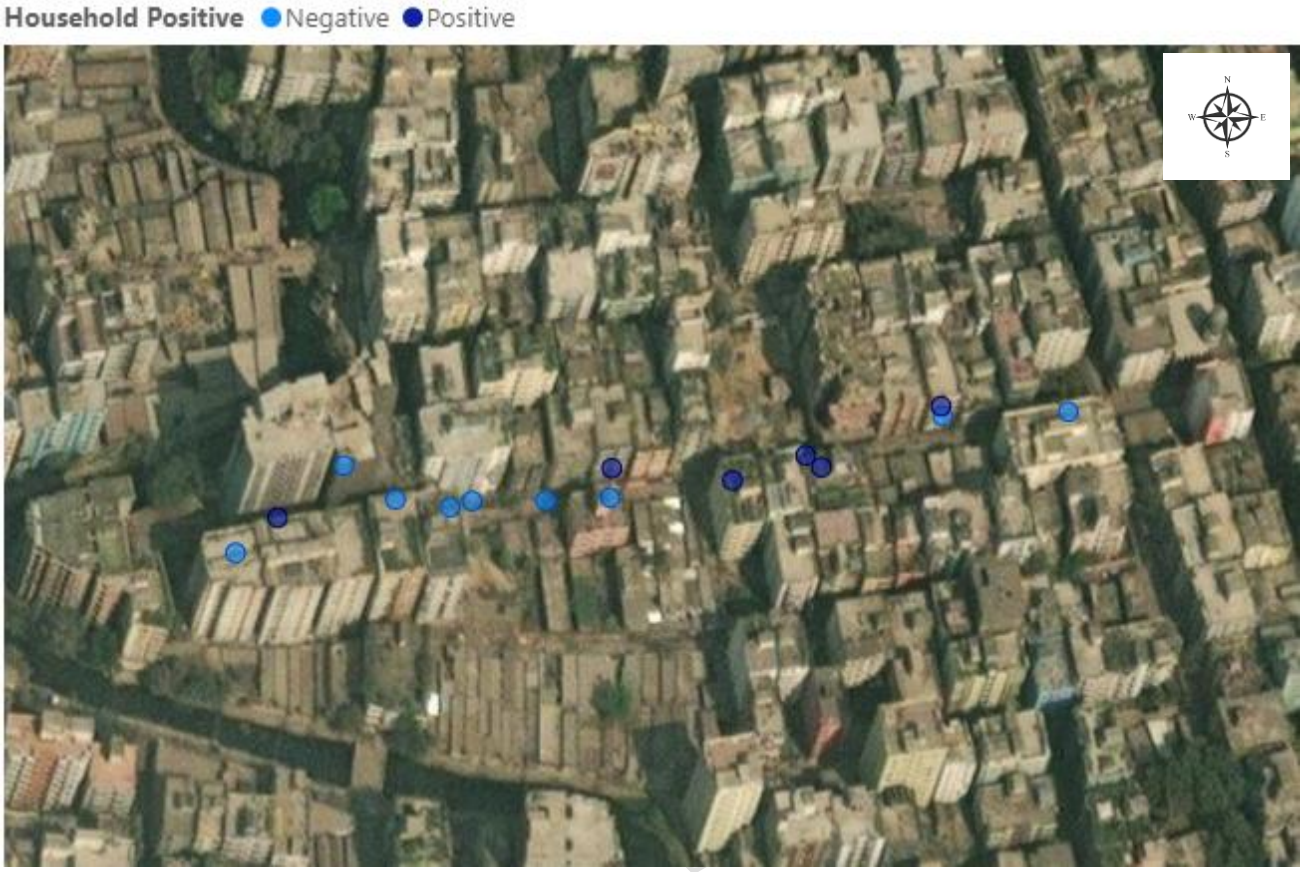
Map 2: Positive and Negative House of Mirpur 2 at Weeks 102



Map 3: Positive and Negative House of Gulshan 1 at Weeks 102



Map 4: Positive and Negative House of Mirpur 1 at Weeks 102



Map 5: Positive and Negative House of Mohammadpur at Weeks 102

Table 5: Positive House, Wet Container, BI, CI and HI in Zones (1-5) in Week 102 (May 8-13, 2026)

Zone	Total House	Positive House	Total Wet container	Positive Wet Container	BI	CI	HI
1	15	4	24	4	26.67	16.67	26.67
2	15	0	0	0	0.00	0.00	0.00
3	15	1	18	1	6.67	5.56	6.67
4	15	2	12	3	20.00	25.00	13.33
5	15	6	28	12	80.00	42.86	40.00

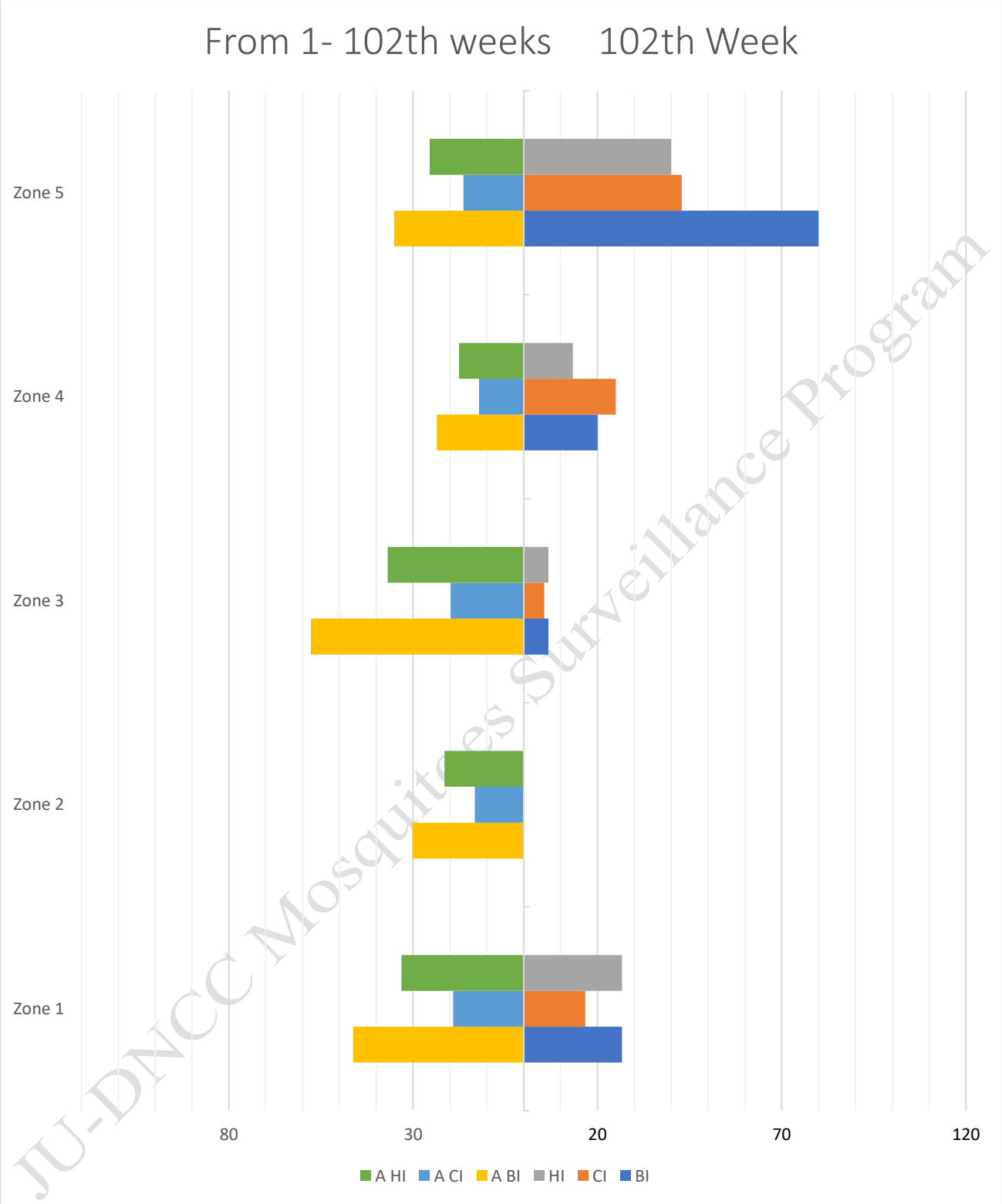


Fig. 6: BI, CI and HI in Different Zones (1-5) of Dhaka north City Corporation

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

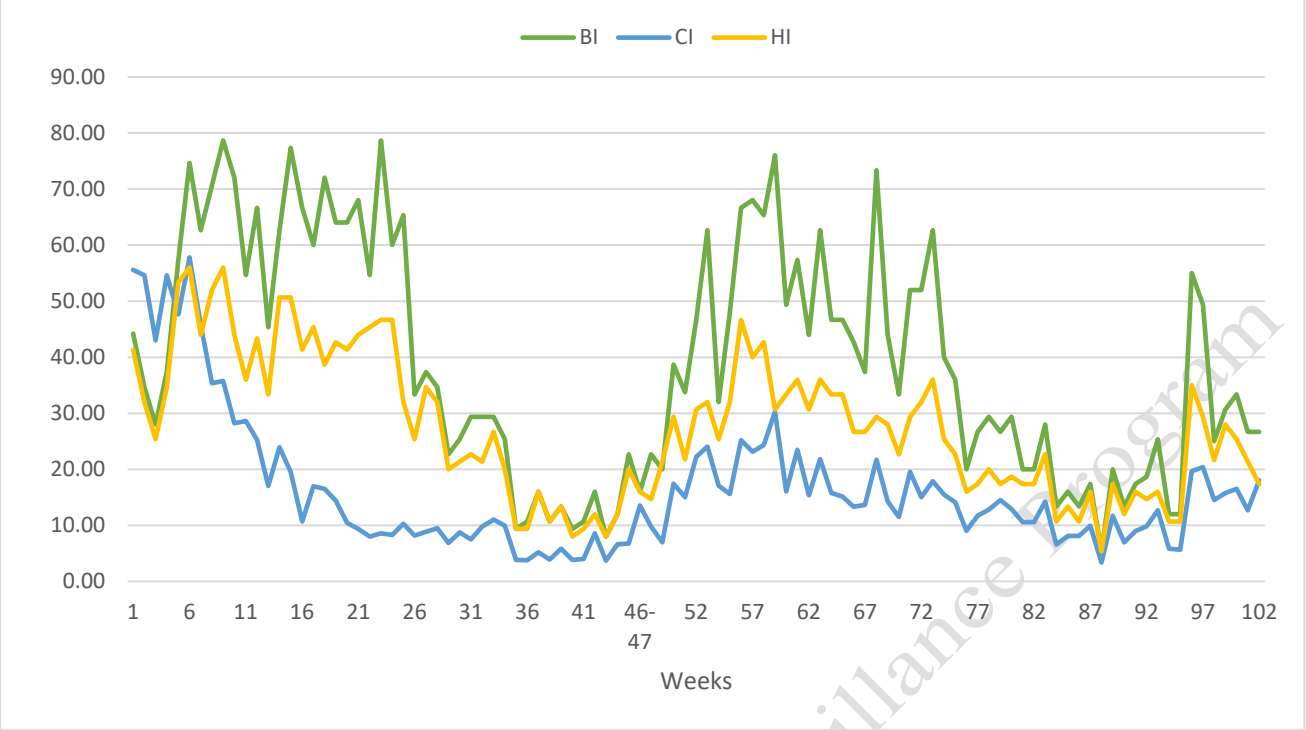


Fig 7: Mosquitoes population fluctuation (BI, CI, HI) from Week 1 to Week 102 (May 2, 2024 - May 13, 2026)

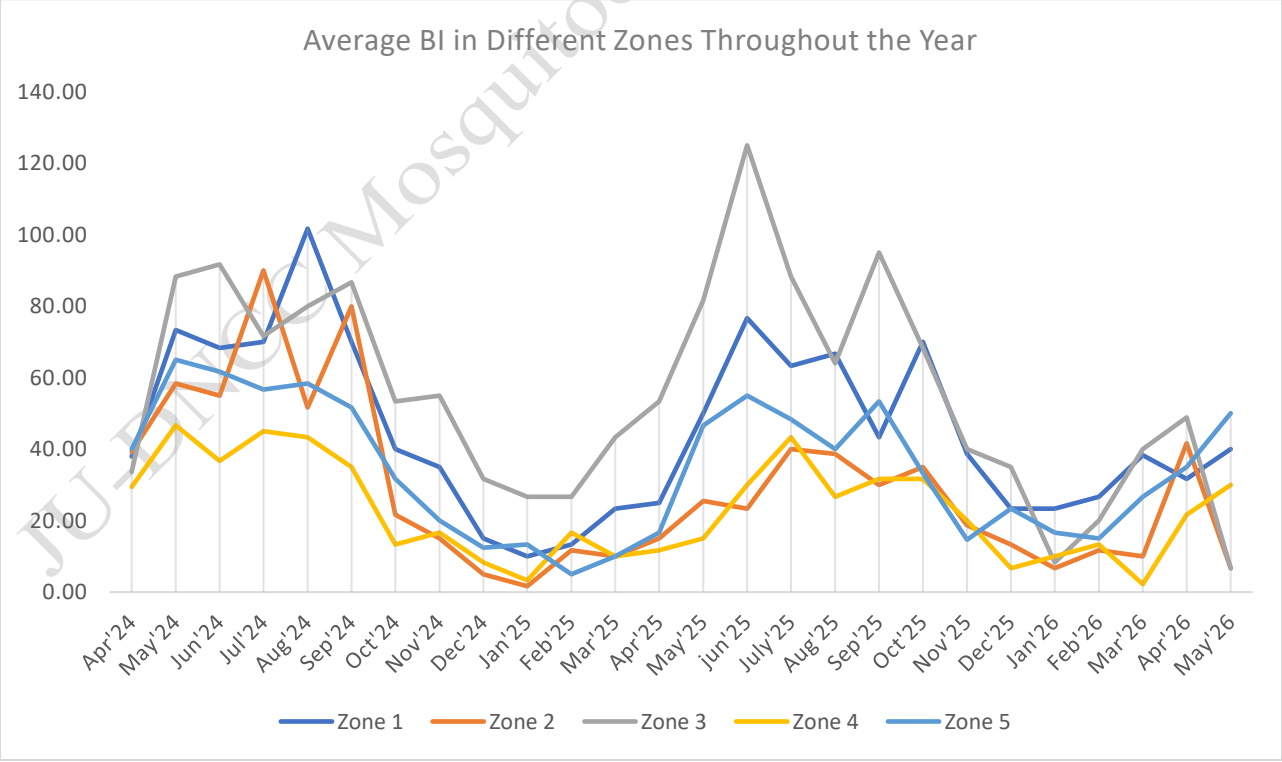


Fig. 8: Breteau Index (BI) in Different Zones from Week 1 to Week 102 (May 2, 2024 - May 13, 2026)

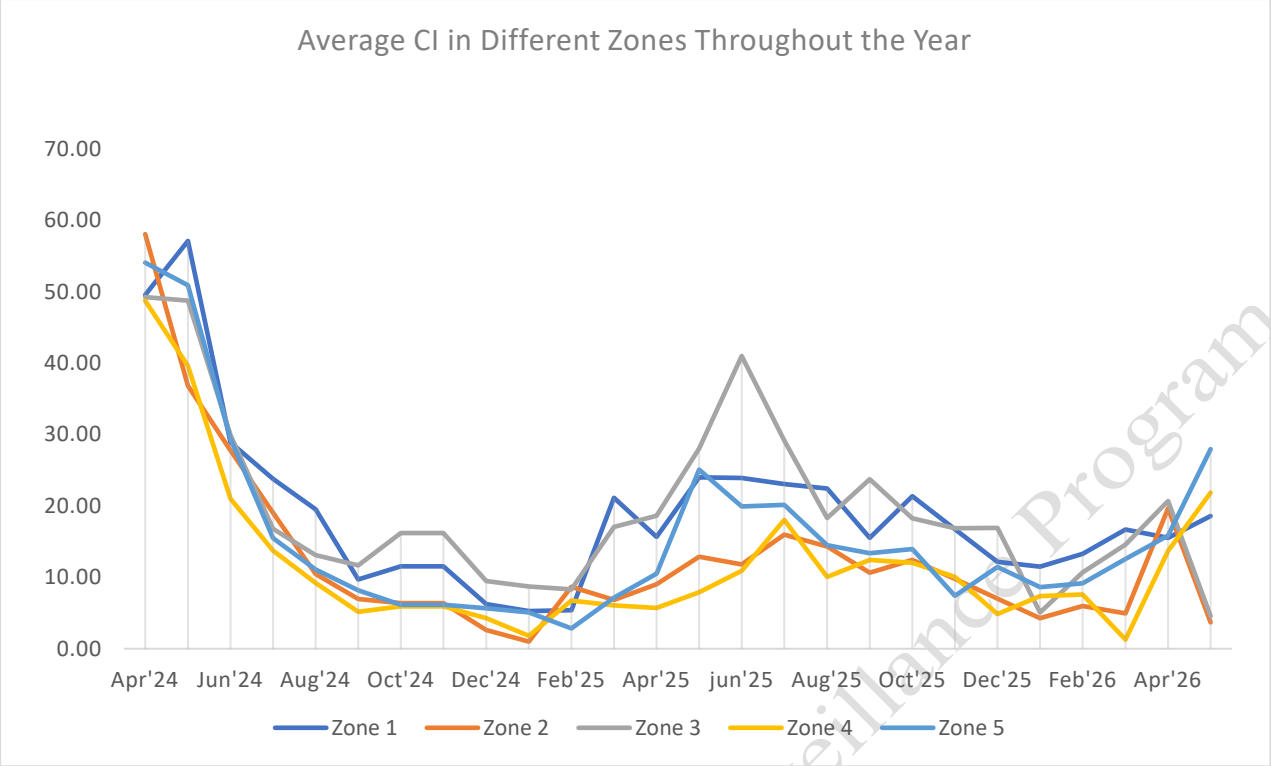


Fig. 9: Container Index (CI) in Different Zones from Week 1 to Week 102 (May 2, 2024 - May 13, 2026)

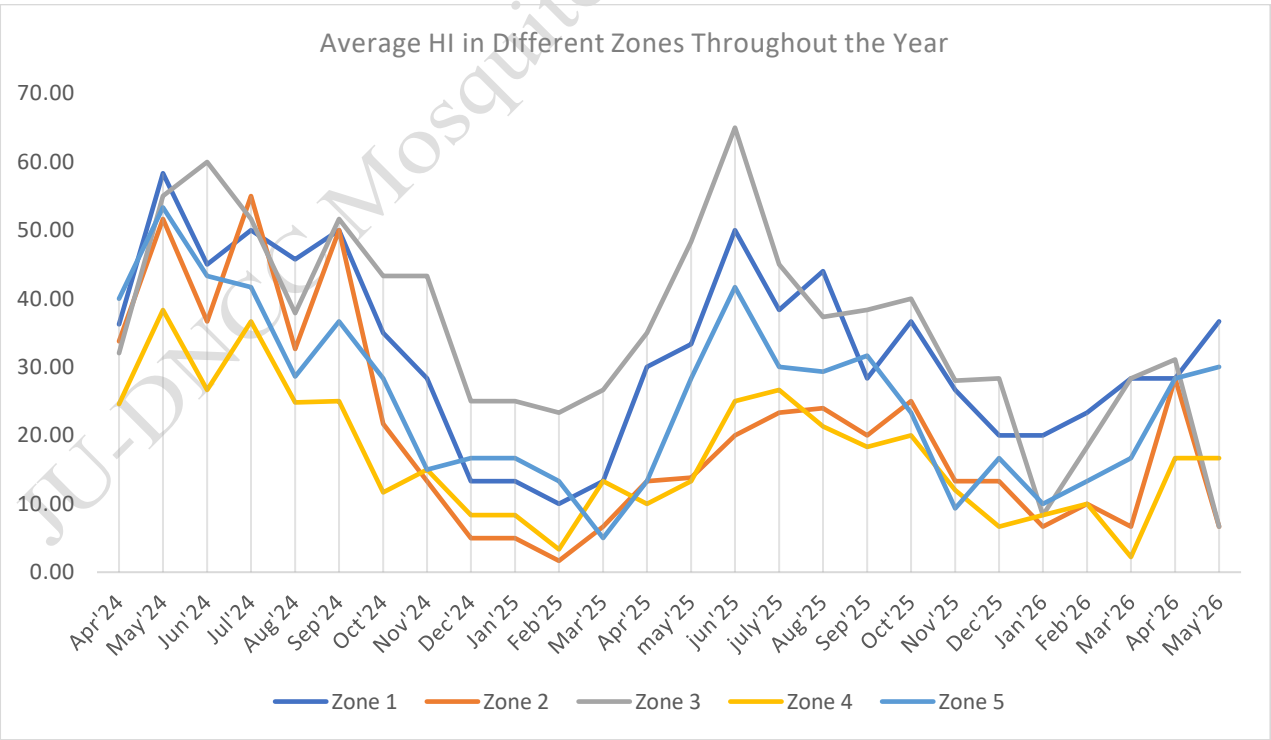


Fig. 10: House Index (HI) in Different Zones from Week 1 to Week 102 (May 2, 2024 - May 13, 2026)

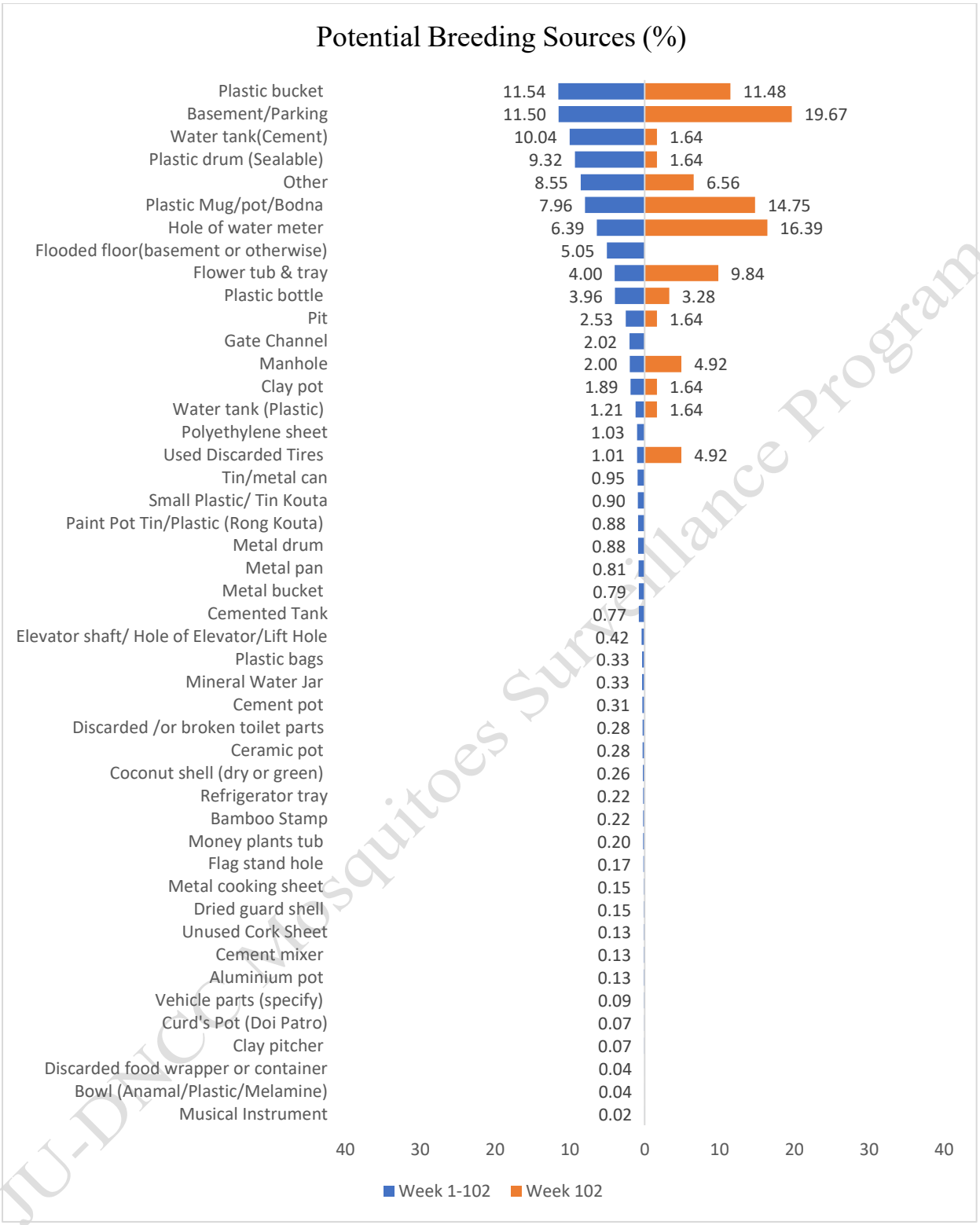


Fig. 11: Container Frequency for *Aedes* mosquitoes in Zones (1-5)

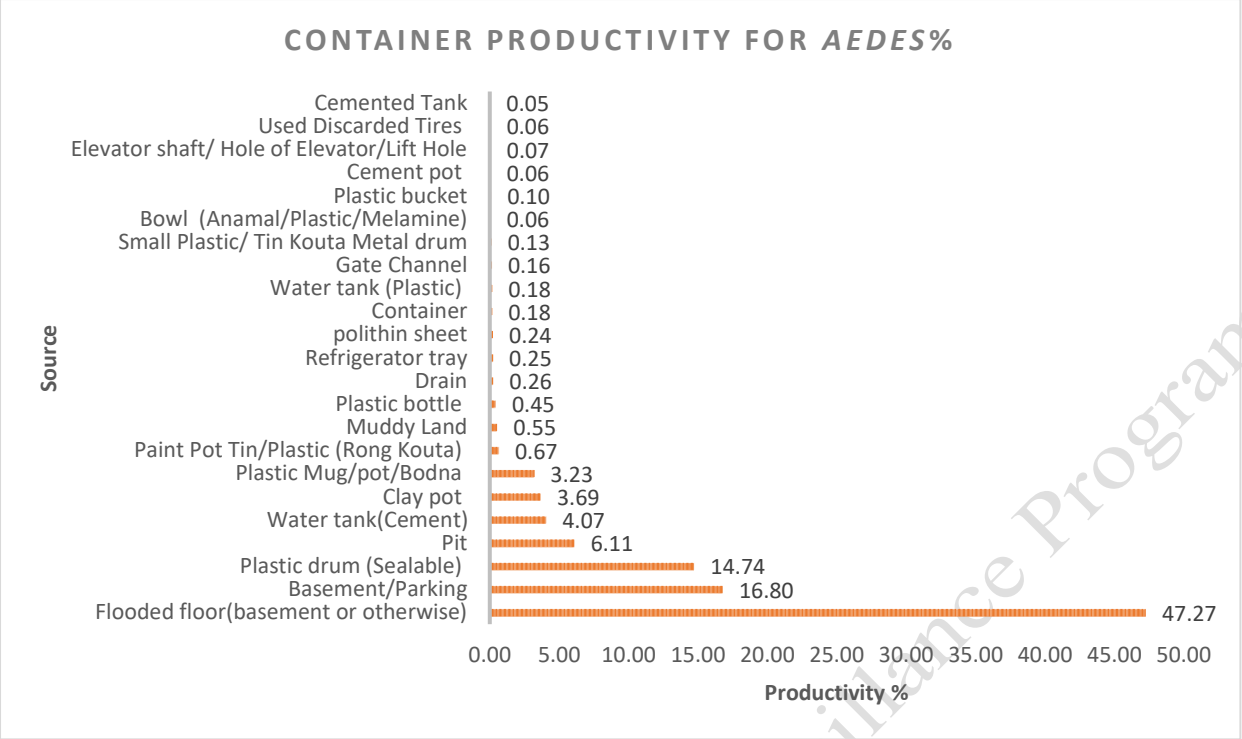


Fig. 12: Container Productivity of *Aedes* mosquito in DNCC from Week 1 to Week 102 (May 2, 2024 - May 13, 2026)

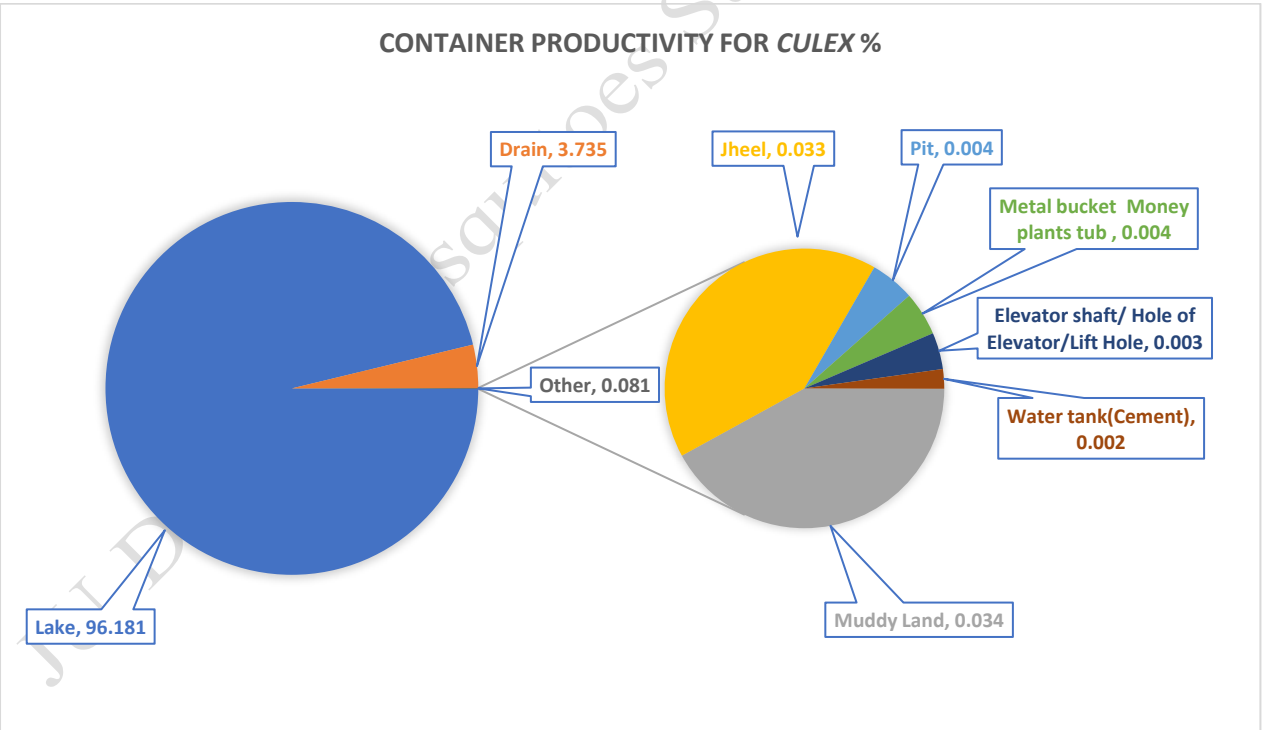


Fig. 13: Container Productivity of *Culex* mosquito in DNCC, from Week 1 to Week 102 (May 2, 2024 - May 13, 2026)

Table 6: Container Frequency & Probable potential Wet Container in zones (1-5) from Week 1 to Week 102 (May 2, 2024 - May 13, 2026)

Sources	+House	-WC	+WC	**Total WC**	% WC	% PWC
Plastic bucket	213	270	359	629	11.54	6.59
Basement/Parking	227	56	571	627	11.50	10.48
Water tank(Cement)	169	253	294	547	10.04	5.39
Plastic drum (Sealable)	236	80	428	508	9.32	7.85
Other	226	137	329	466	8.55	6.04
Plastic Mug/pot/Bodna	176	91	343	434	7.96	6.29
Hole of water meter	65	21	327	348	6.39	6.00
Flooded floor(basement or otherwise)	128	138	137	275	5.05	2.51
Flower tub & tray	81	31	187	218	4.00	3.43
Plastic bottle	81	64	152	216	3.96	2.79
Pit	67	23	115	138	2.53	2.11
Gate Channel	33	34	76	110	2.02	1.39
Manhole	57	33	76	109	2.00	1.39
Clay pot	84	11	92	103	1.89	1.69
Water tank (Plastic)	21	28	38	66	1.21	0.70
Polyethylene sheet	35	3	53	56	1.03	0.97
Used Discarded Tires	31	19	36	55	1.01	0.66
Tin/metal can	30	0	52	52	0.95	0.95
Small Plastic/ Tin Kouta	24	9	40	49	0.90	0.73
Metal drum	19	8	40	48	0.88	0.73
Paint Pot Tin/Plastic (Rong Kouta)	30	5	43	48	0.88	0.79
Metal pan	18	3	41	44	0.81	0.75
Metal bucket	21	5	38	43	0.79	0.70
Cemented Tank	22	13	29	42	0.77	0.53
Elevator shaft/ Hole of Elevator/Lift Hole	8	4	19	23	0.42	0.35
Mineral Water Jar	6	4	14	18	0.33	0.26
Plastic bags	8	1	17	18	0.33	0.31
Cement pot	11	2	15	17	0.31	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 102 (May 2, 2024 - May 13, 2026)

Containers	Percentage of Breeding Sources				
	Zone 01	Zone 02	Zone 03	Zone 04	Zone 05
Plastic bucket	1.98	2.06	2.22	2.84	2.44
Basement/Parking	2.88	1.76	2.97	1.12	2.77
Water tank(Cement)	1.28	1.65	1.30	2.92	2.88
Plastic drum (Sealable)	1.32	2.26	1.61	2.18	1.94
Other	2.81	1.49	2.33	0.68	1.25
Plastic Mug/pot/Bodna	1.41	1.41	1.52	2.22	1.39
Hole of water meter	0.81	1.23	0.29	2.06	2.00
Flooded floor(basement or otherwise)	1.30	1.12	0.84	0.55	1.23
Flower tub & tray	1.17	0.59	1.32	0.59	0.33
Plastic bottle	0.51	0.92	0.57	1.05	0.92
Pit	0.64	0.37	0.84	0.31	0.37
Gate Channel	0.79	0.18	0.57	0.07	0.40
Manhole	0.77	0.22	0.68	0.22	0.11
Clay pot	0.24	0.39	0.57	0.22	0.48
Water tank (Plastic)	0.00	0.75	0.17	0.15	0.15
Polyethylene sheet	0.29	0.28	0.20	0.18	0.07
Used Discarded Tires	0.37	0.28	0.18	0.07	0.11
Tin/metal can	0.28	0.26	0.18	0.18	0.06
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	0.18	0.22	0.11
Elevator shaft/ Hole of Elevator/Lift Hole	0.18	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

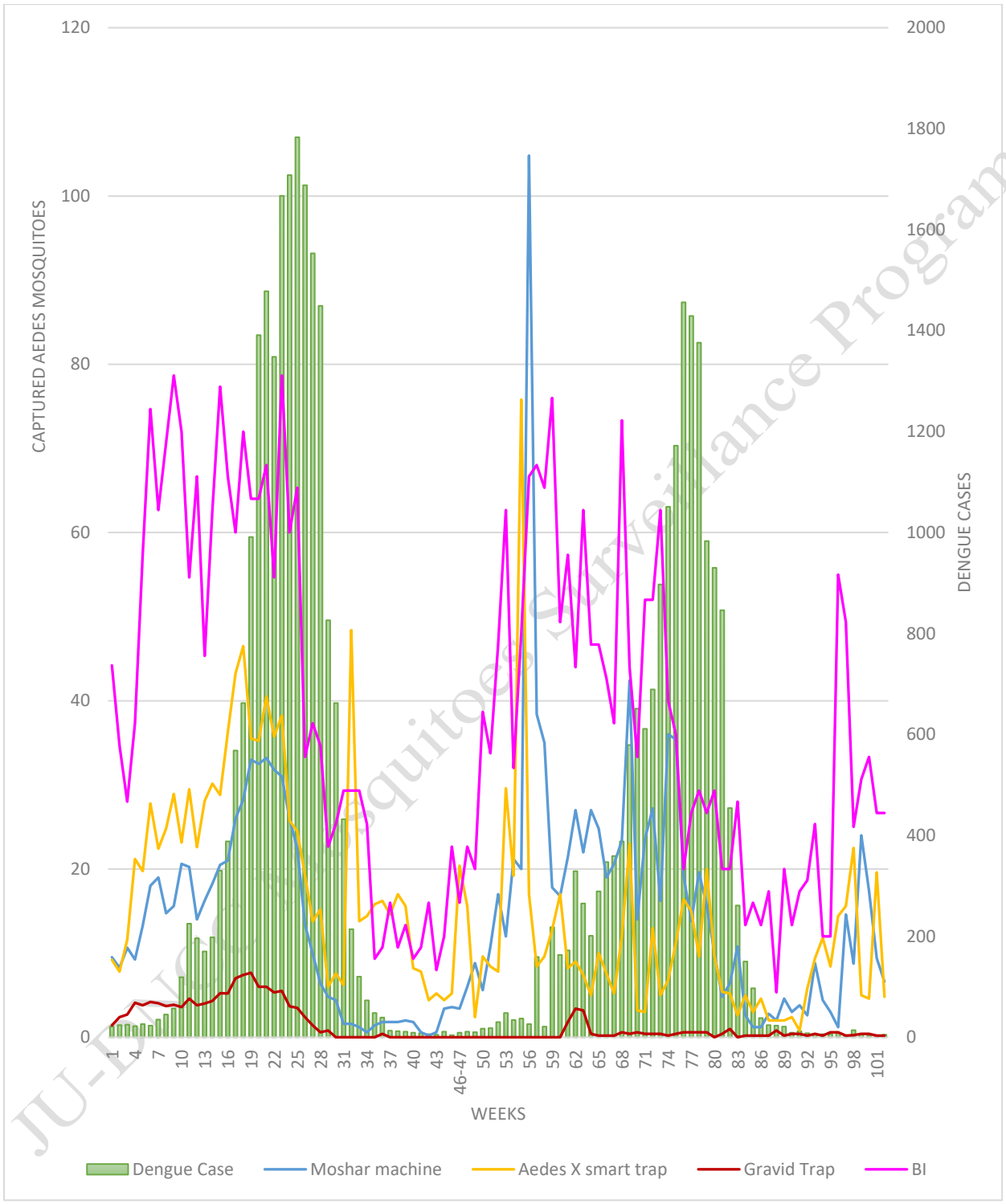


Fig. 14: Correlation between Dengue Cases and *Aedes* Mosquitoes Captured by per Moshar Machine CO_2 traps, Aedes X smart traps, and Gravid traps

NB: DNCC dengue cases only

Photographs of Mosquitoes Surveillance

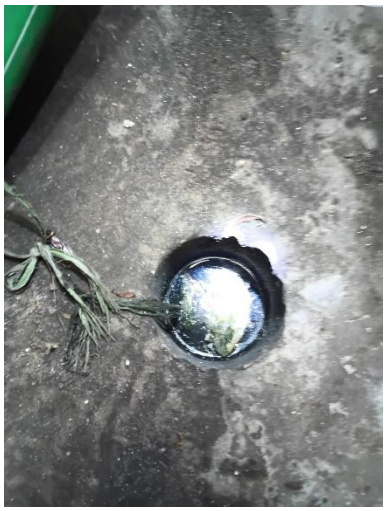








Samples Collection from Field

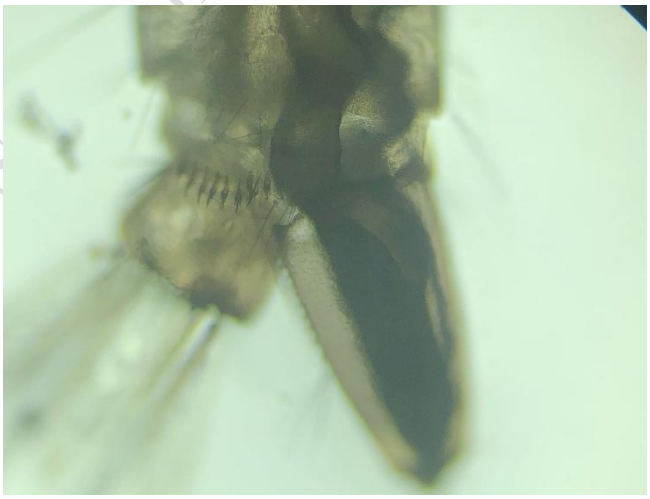









Samples Processing and Identification



Comments:

The mosquito density is decreasing and the dengue cases declining rapidly. The Breteau Index (BI) is not changed in week 102. 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

(Tabassum Mostofa Mim)
Entomologist
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(Prof. Dr. Kabirul Bashar)
Focal person
IRES
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