Weekly Report on

JU-DNCC Mosquitoes Surveillance Program

Week 112 (July 24-28, 2026)

Submitted To

Chief Health officer
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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.

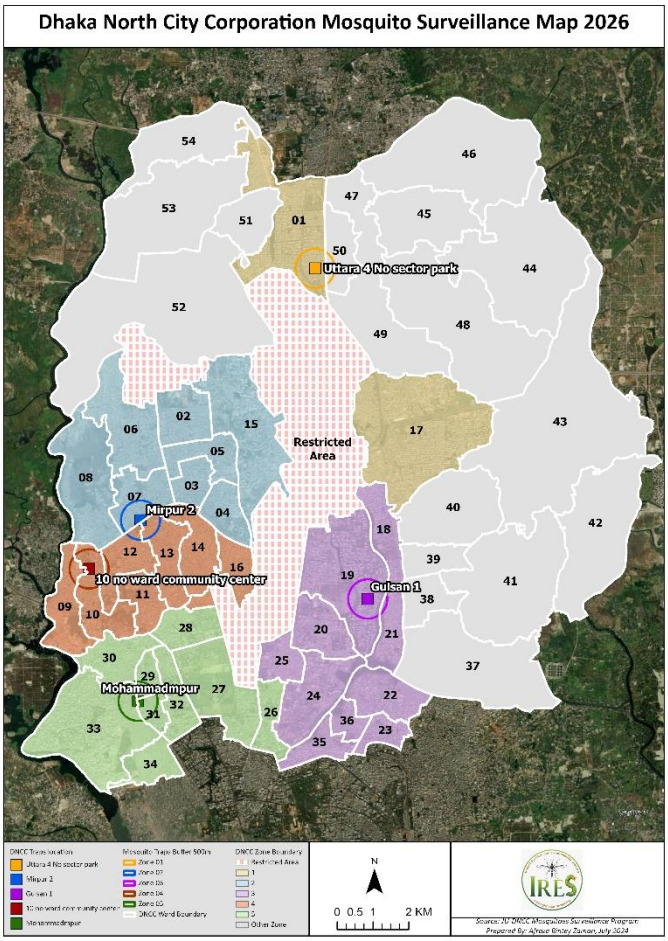
Zone	Traps Location	GPS Location
01	Uttara-4 No sector park	23.8613672,90.4035528
02	Mirpur-2, Vander office, DNCC	23.8036248,90.3601995
03	Gulsan 1, Purantan Vander office	23.7860557,90.4164024
04	10 No ward community center, Mirpur-1	23.7922967,90.3467992
05	Mohammadpur regional office of DNCC	23.7618721,90.3590884

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 112 (July 24-28, 2026)

Zone	*Ae. aegypti*	*Ae. albopictus*	*Cx. quinquefasciatus*	*Cx. tritaeniorhynchus*	*Cx. gelidus*	*Ar. subalbatus*	*An. subpictus*	Total	%
1	12	4	1862	362	128	16	2	2386	23.10
2	16	2	289	116	0	12	0	435	4.21
3	22	4	267	112	0	8	0	413	4.00
4	25	4	3268	1486	0	126	0	4909	47.52
5	17	4	1887	268	0	11	0	2187	21.17
Total	92	18	7573	2344	128	173	2	10330	100.00
%	0.89	0.17	73.31	22.69	1.24	1.67	0.02	100.00	

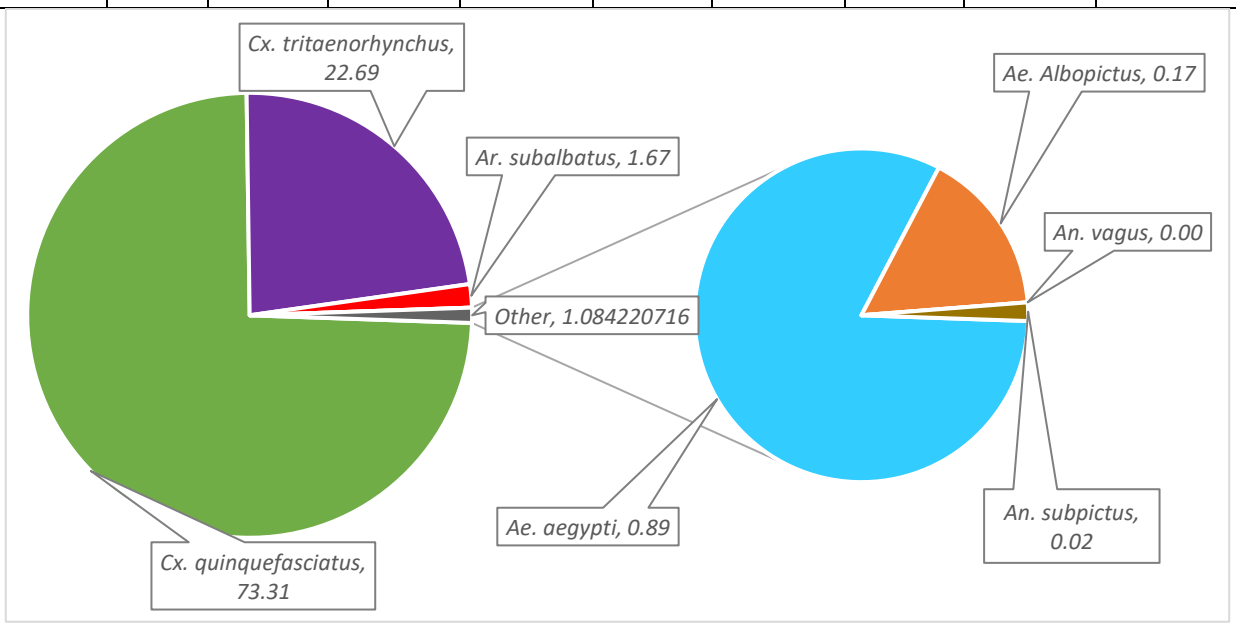


Fig. 1: Percentage of Adult Mosquitoes Collected by Moshar Machine (CO_2) traps in Week 112 (July 24-28, 2026)

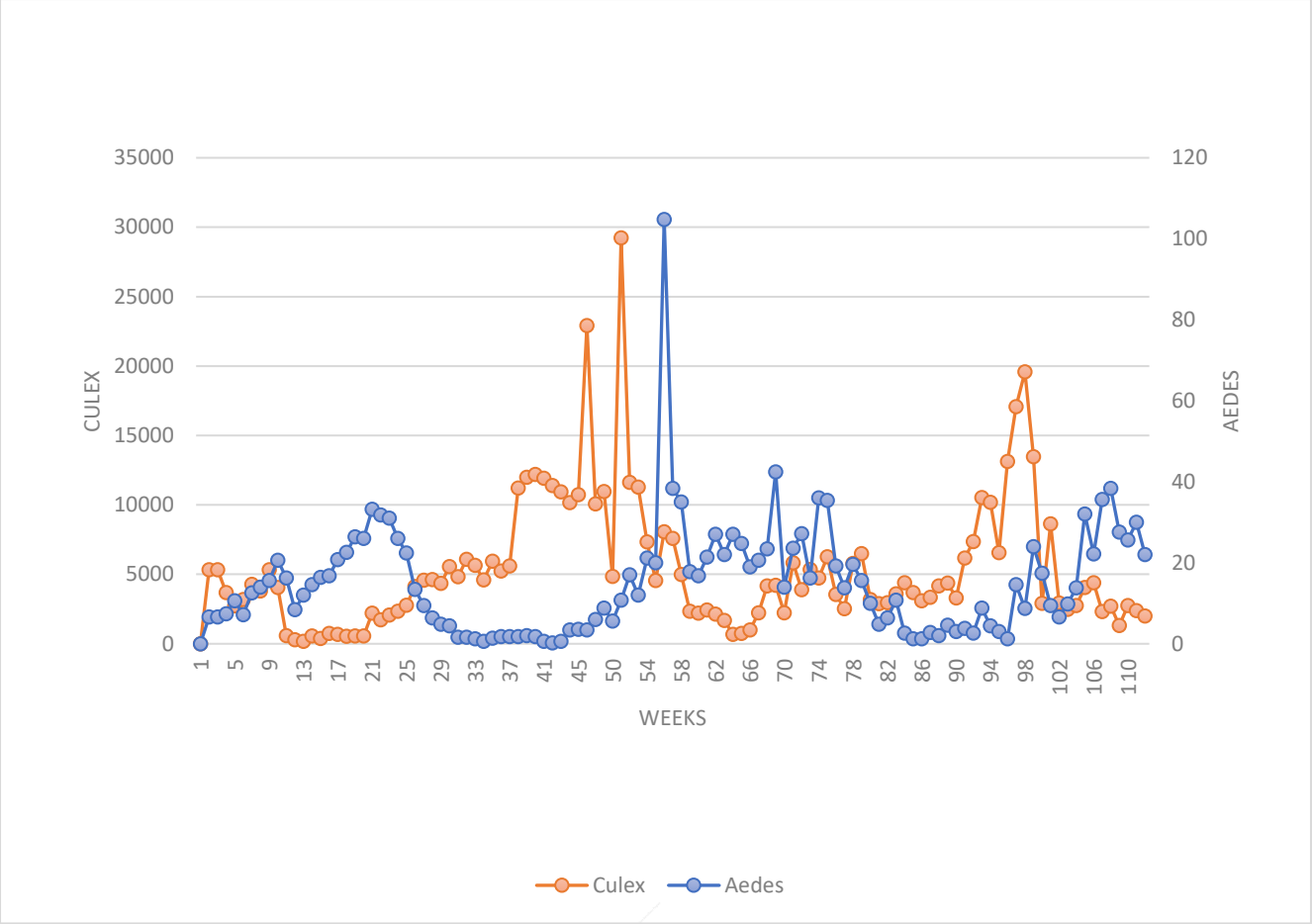


Fig 2: Average number of mosquitoes per Moshar Machine (CO_2) traps from Week 1 to Week 112 (May 2, 2024 – July 28, 2026)

Table 2. Collected Mosquito Larvae from *Aedes* X smart Traps in Week 112 (July 24-28, 2026)

Zone	N	*Ae. aegypti*	*Ae. albopictus*
1	0	0	0
2	8	0	8
3	0	0	0
4	12	12	0
5	7	7	0
Total	27	19	8
(%)	100.00	70.37	29.63

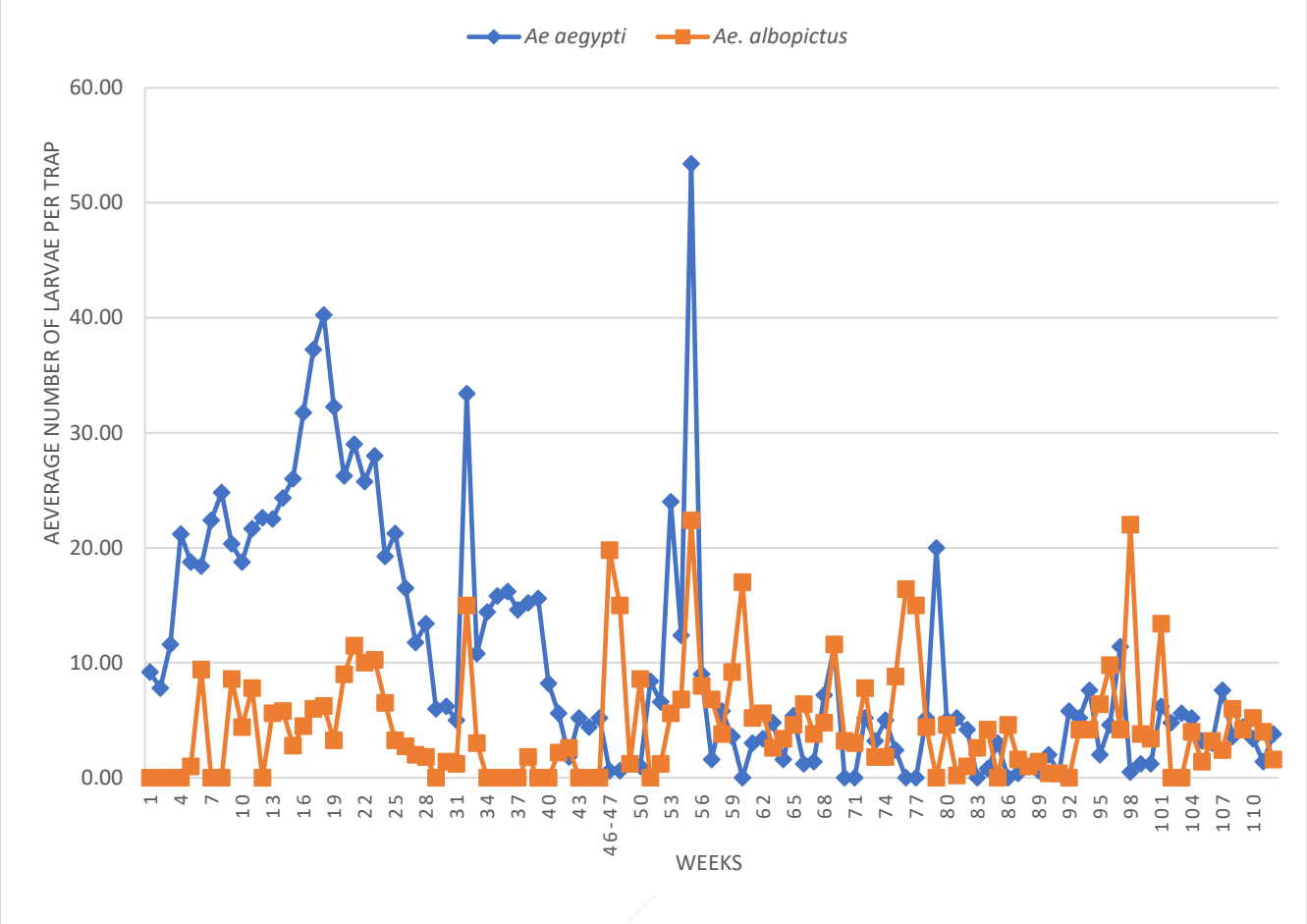


Fig 3: Average Number of *Aedes* Larvae per *Aedes* X Smart Trap in Zones 1-5 from Week 1 to Week 112 (May 2, 2024 – July 28, 2026)

Table 3. Collected Adult Mosquitoes from Gravid Trap in Week 112 (July 24-28, 2026)

Zone	Number of Mosquitoes	*Ae. aegypti*	*Ae. albopictus*	*Cx. quinquefasciatus*
1	1	0	0	1
2	1	1	0	0
3	1	0	1	0
4	2	0	0	2
5	1	0	1	0
Total	6	1	2	3
(%)	100.00	16.67	33.33	50.00

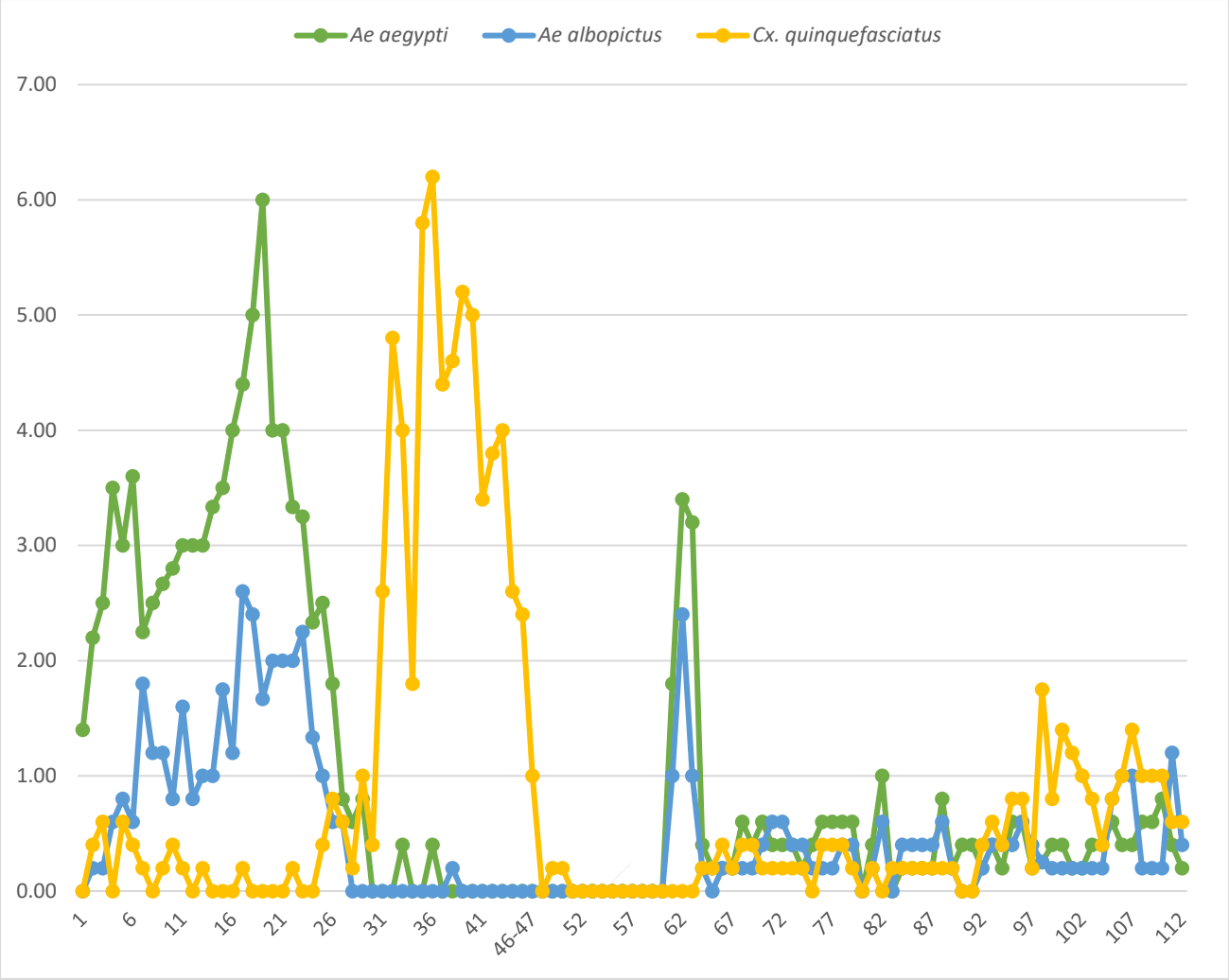


Fig 4: Average number of adult mosquitoes per Gravid trap in zones 1-5 from Week 1 to Week 112 (May 2, 2024 – July 28, 2026)

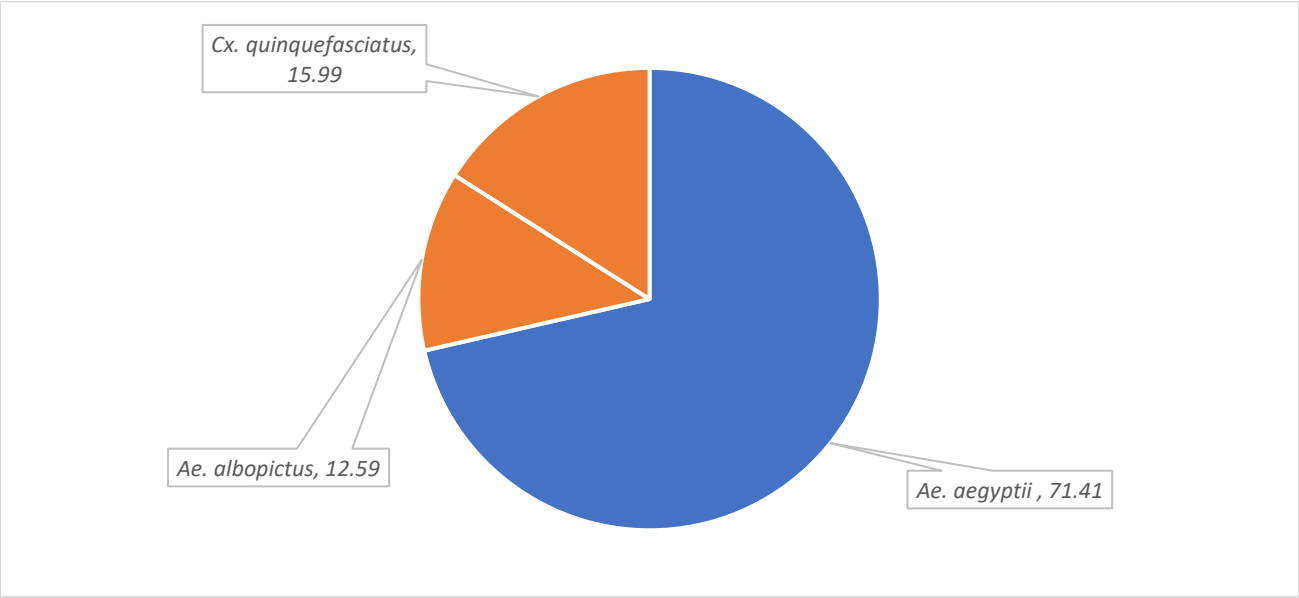


Fig. 5: Percentage of Mosquito Larvae from Zones (1-5) in Week 112 (July 24-28, 2026)

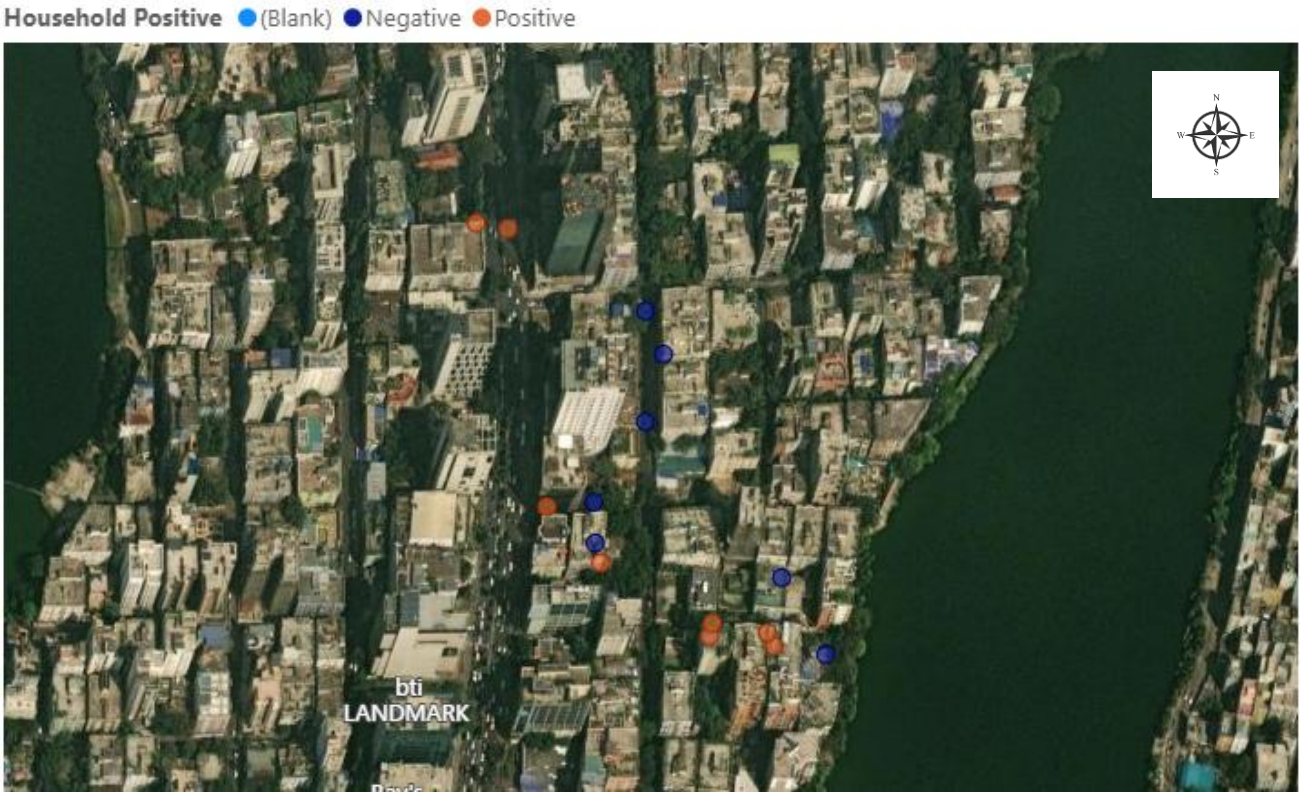
Table 4. Positive Larval Spots in Different Zones (1-5) with Estimated Number of Larvae in Week 112 (July 24-28, 2026)

Zone	GPS Location	*Ae. aegypti*	*Ae. albopictus*	*Cx. quinquefasciatus*	*Source*
1	23.8603484 90.4032049	234	0	0	Tin/metal can
	23.8650913 90.4045756	124	0	0	Plastic bucket
	23.8651338 90.4043181	52	0	0	Basement/Parking
	23.8652319 90.4038427	0	23	0	Plastic bucket
	23.8657156 90.4044449	23	0	0	Flower tub & tray
	23.8655817 90.4051679	23	0	0	Plastic bucket
	23.8656516 90.4051288	21	0	0	Clay pot
	total	477	23	0	
2	23.8034754 90.3577942	5	0	0	Used Discarded Tires
	total	5	0	0	
3	23.7833539 90.4182236	23	0	0	Basement/Parking
	23.7833017 90.418549	52	0	0	Plastic bucket
	23.7832298 90.4185881	0	0	254	Pit
	23.7854833 90.4170175	8	0	0	Flag stand hole
	23.7855135 90.4168303	124	0	0	Flower tub & tray
	23.7839819 90.4172474	154	0	0	Basement/Parking
	23.78368 90.4175656	12	0	0	Plastic bucket

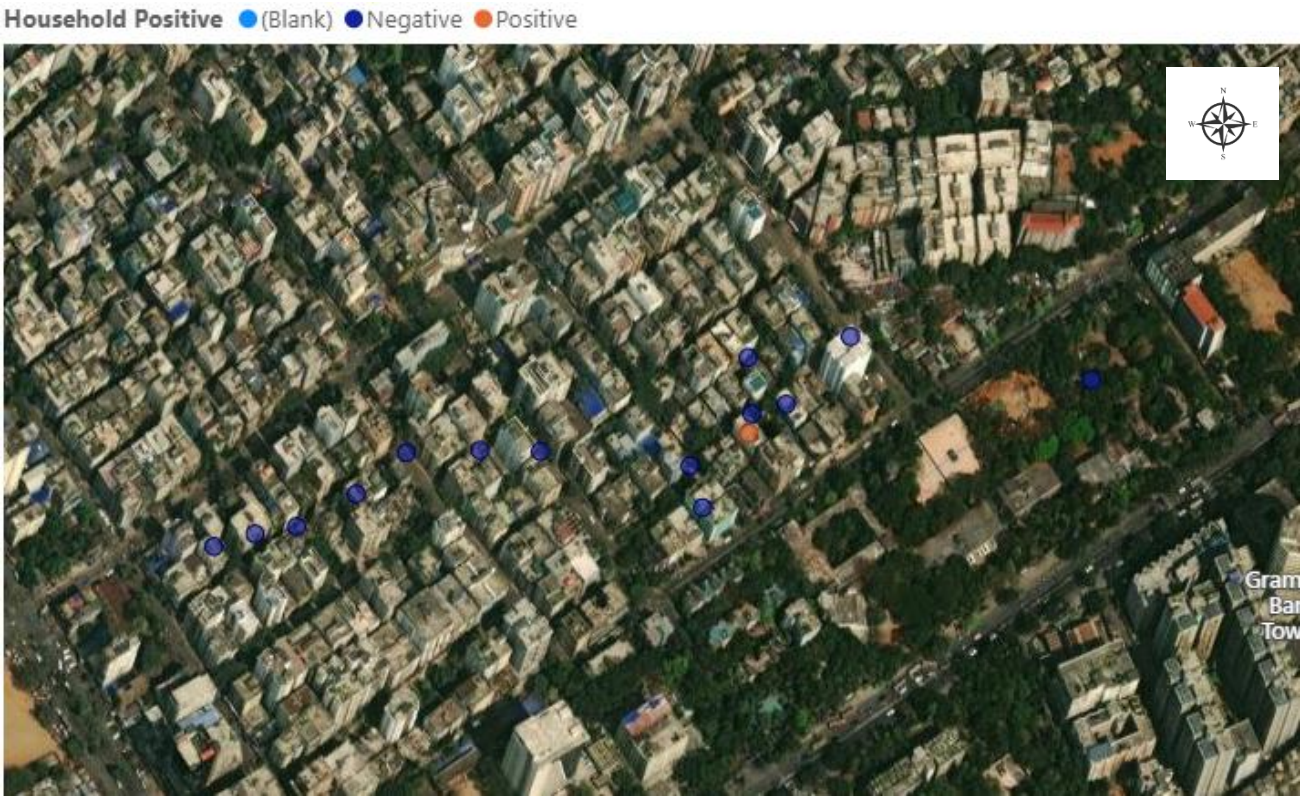
	23.7832823 90.418207	0	52	0	Flower tub & tray
	total	373	52	254	
4	23.7885505 90.3485891	0	125	0	Other
	23.788545 90.348486	9	0	0	Plastic bucket
	23.7899552 90.3487102	154	0	0	Basement/Parking
	23.7902874 90.349393	8	0	0	Plastic Mug/pot/Bodna
	total	171	125	0	
5	23.7634551 90.355947	8	0	0	Plastic drum (Sealable)
	23.7627503 90.3560414	23	0	0	Plastic bucket
	23.7624332 90.3562098	45	0	0	Flower tub & tray
	23.7618018 90.3563943	32	0	0	Flooded floor (basement or otherwise)
	total	108	0	0	
Grand Total		1134	200	254	



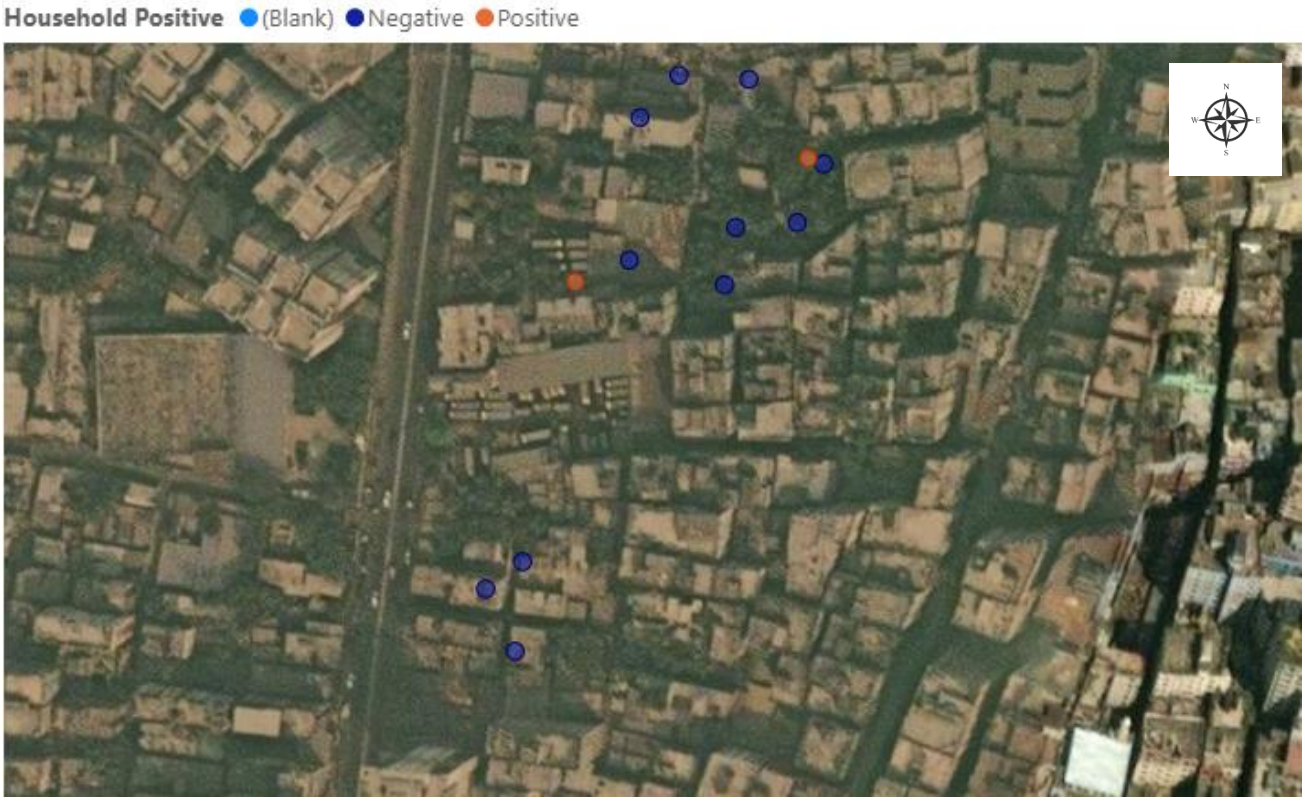
Map 1: Positive and Negative House of Uttara 4 No. Sector at Weeks 112



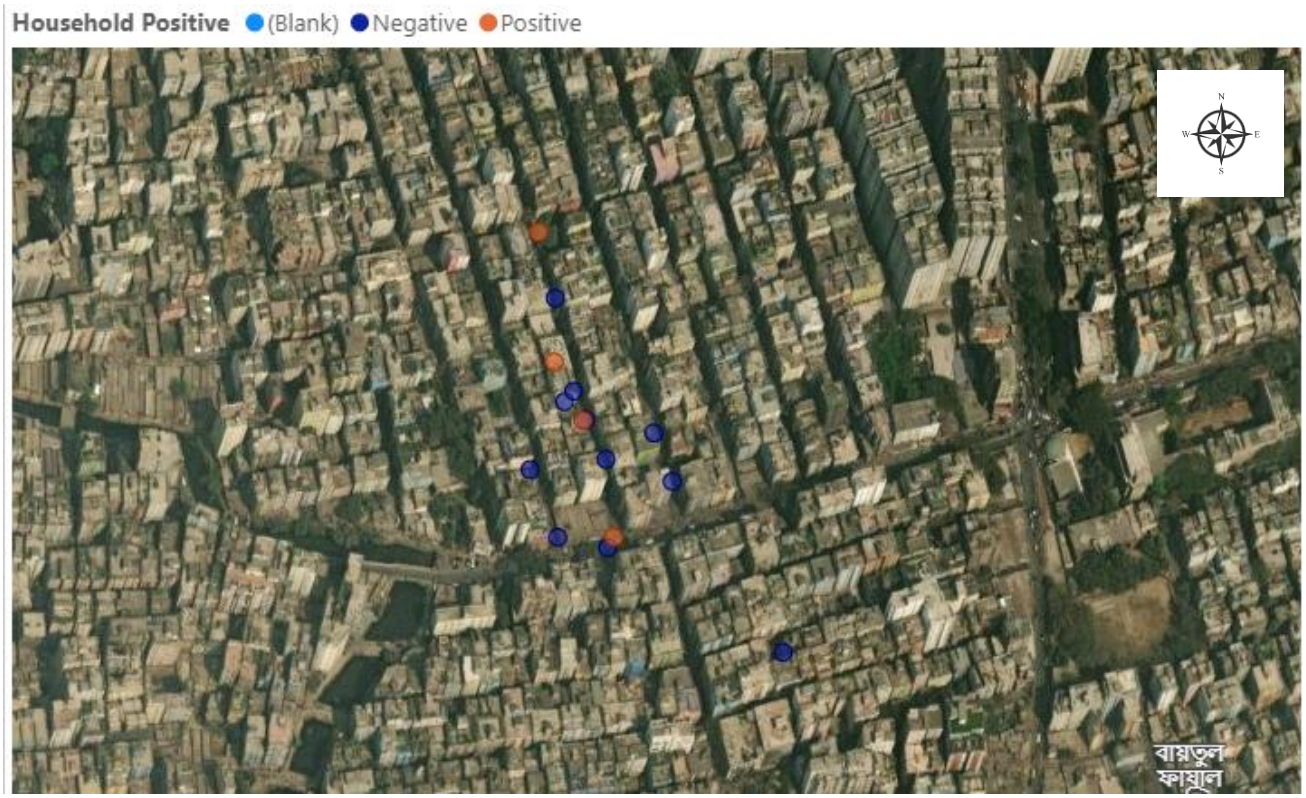
Map 2: Positive and Negative House of Mirpur 2 at Weeks 112



Map 3: Positive and Negative House of Gulshan 1 at Weeks 112



Map 4: Positive and Negative House of Mirpur 1 at Weeks 112



Map 5: Positive and Negative House of Mohammadpur at Weeks 112

Table 5: Positive House, Wet Container, BI, CI and HI in Zones (1-5) in Week 112 (July 24-28, 2026)

Zone	Total House	Positive House	Total Wet container	Positive Wet Container	BI	CI	HI
1	15	7	57	8	53.33	14.04	46.67
2	15	1	32	1	6.67	3.13	6.67
3	15	8	51	11	73.33	21.57	53.33
4	15	4	35	4	26.67	11.43	26.67
5	15	4	42	6	40.00	14.29	26.67

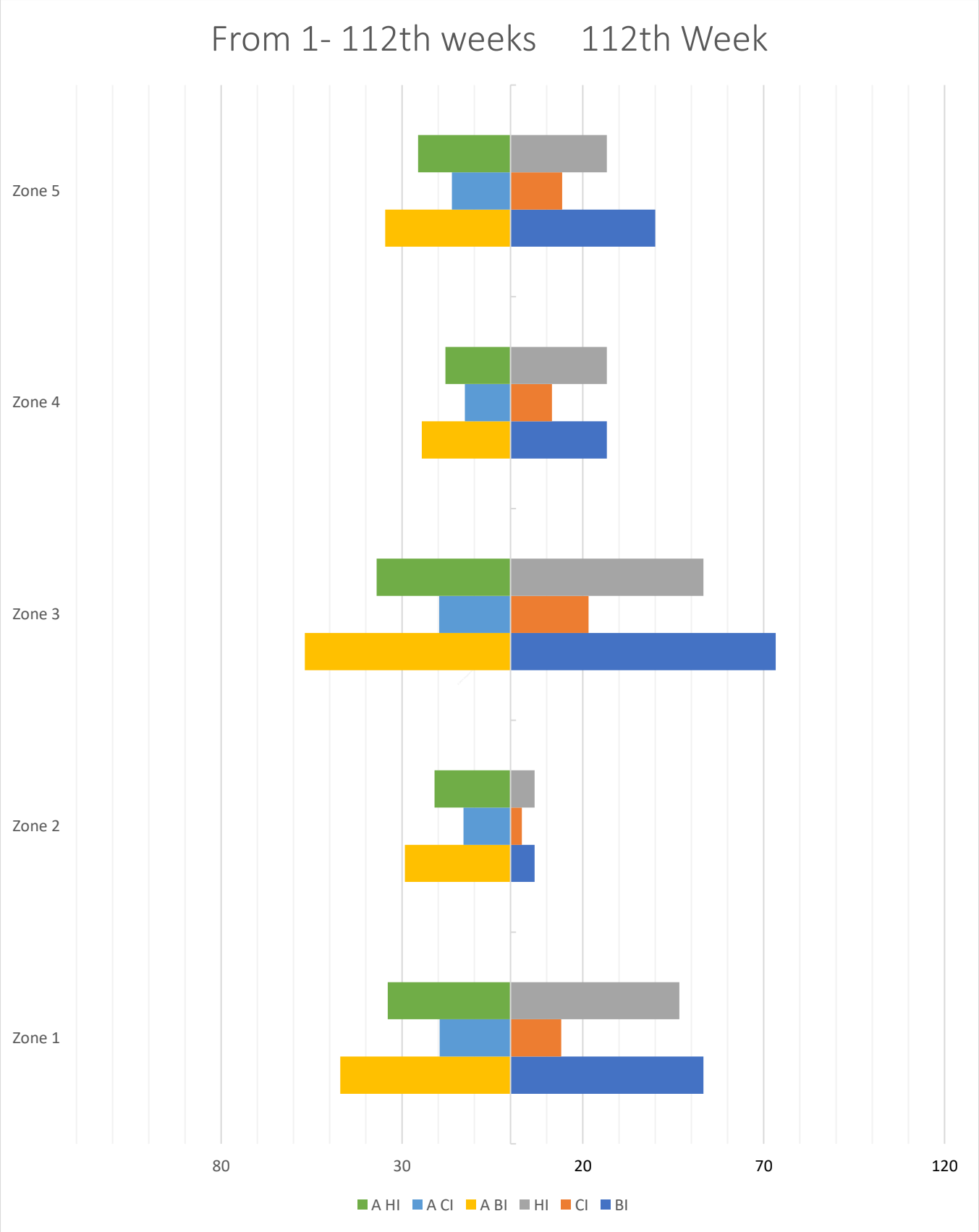


Fig. 6: BI, CI and HI in Different Zones (1-5) of Dhaka north City Corporation

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

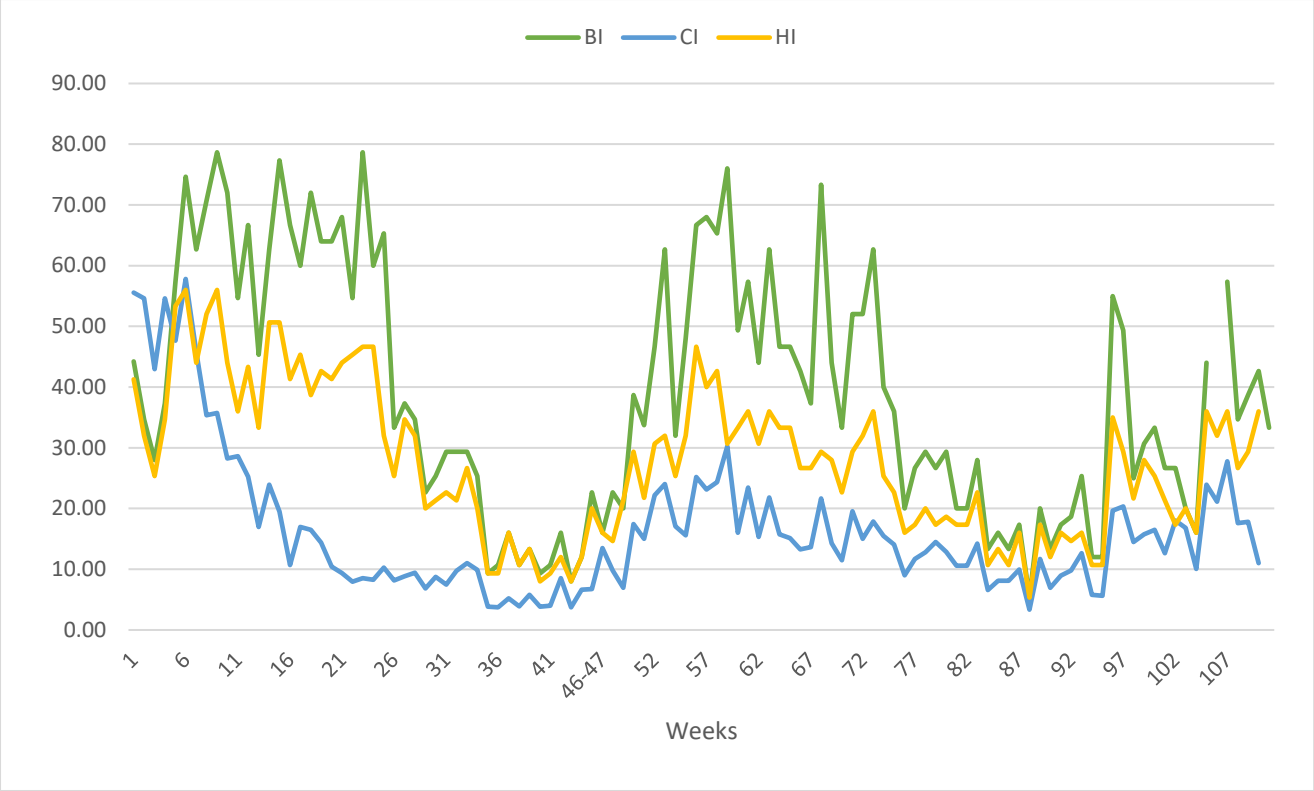


Fig 7: Mosquitoes population fluctuation (BI, CI, HI) from Week 1 to Week 112 (May 2, 2024 – July 28, 2026)

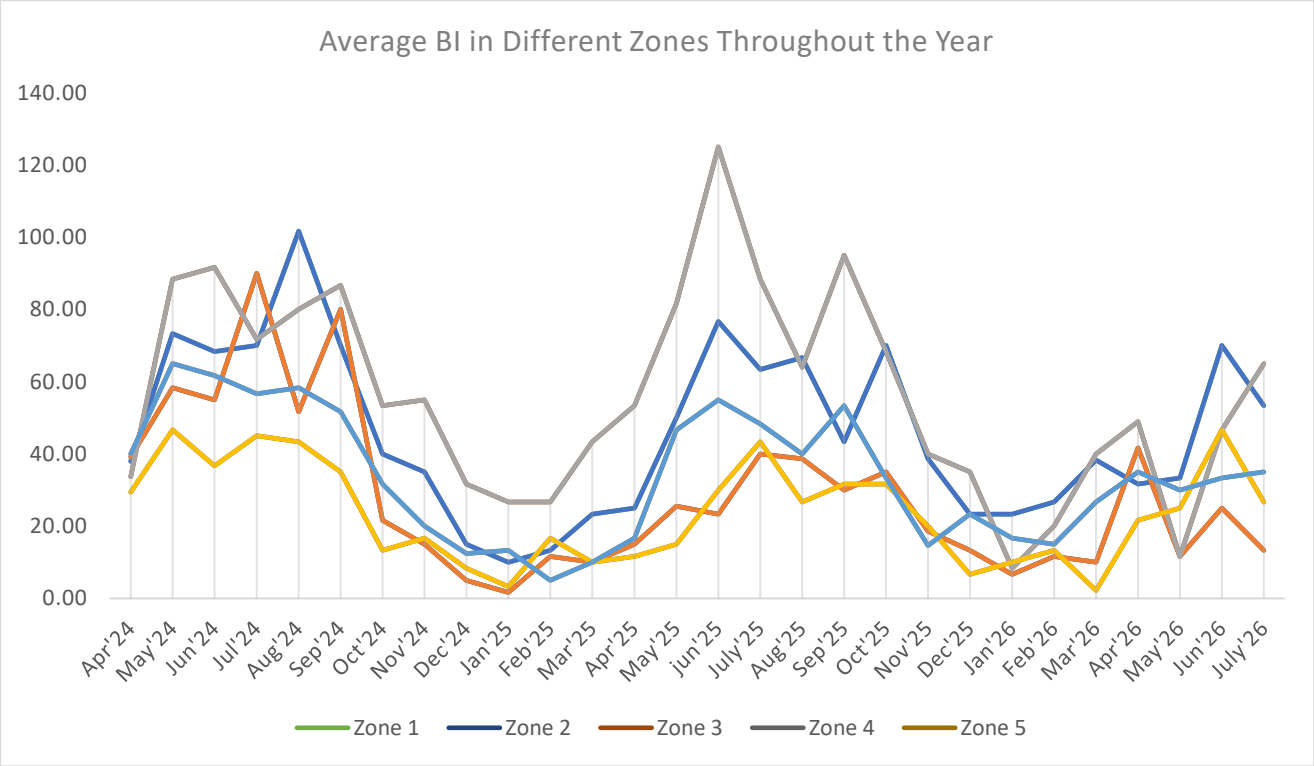


Fig. 8: Breteau Index (BI) in Different Zones from Week 1 to Week 112 (May 2, 2024 – July 28, 2026)

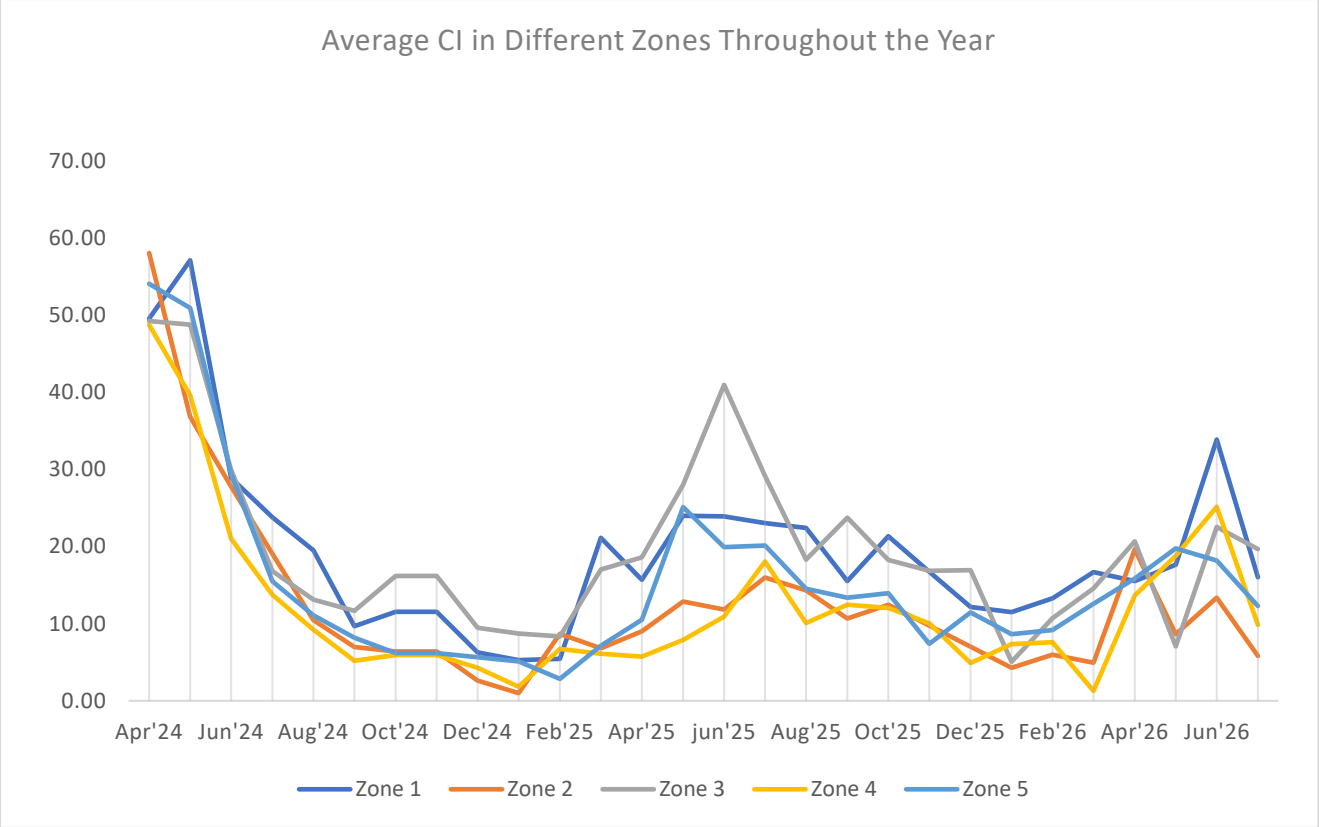


Fig. 9: Container Index (CI) in Different Zones from Week 1 to Week 112 (May 2, 2024 – July 28, 2026)

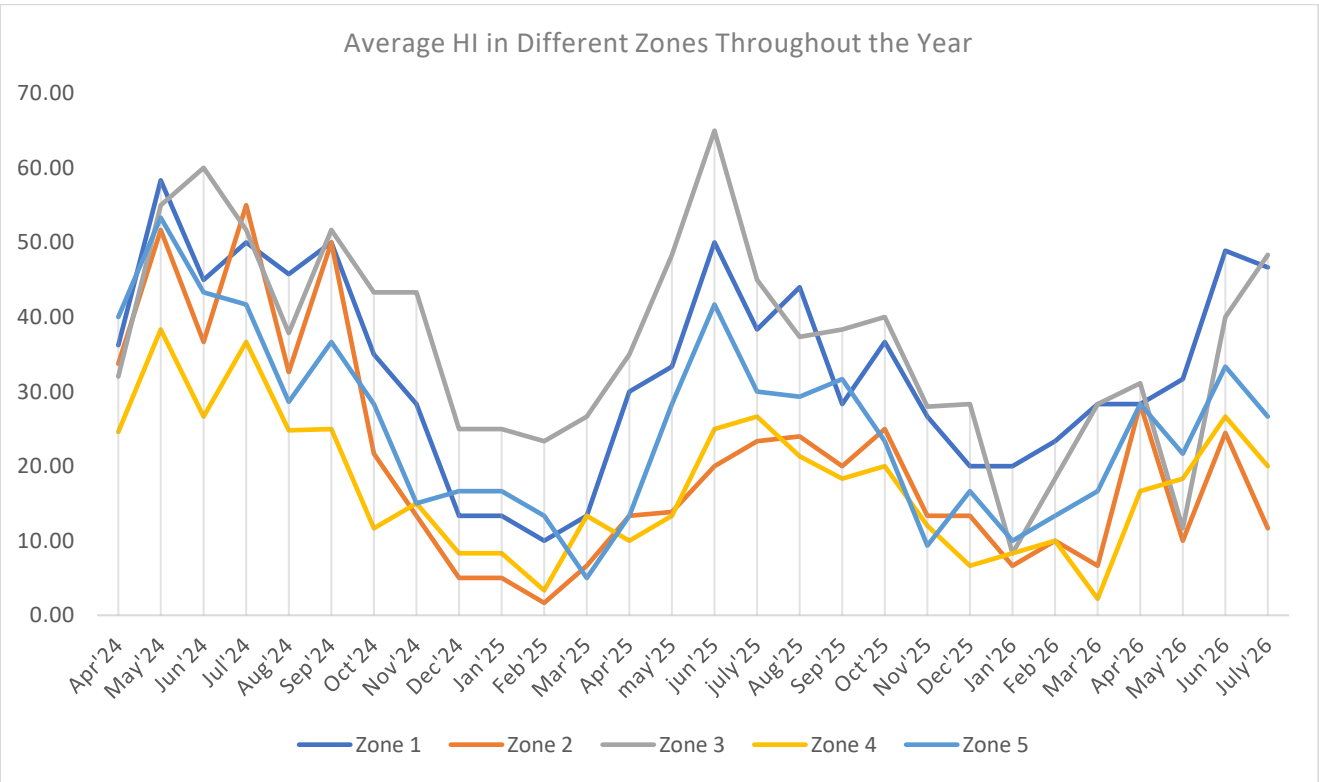


Fig. 10: House Index (HI) in Different Zones from Week 1 to Week 112 (May 2, 2024 – July 28, 2026)

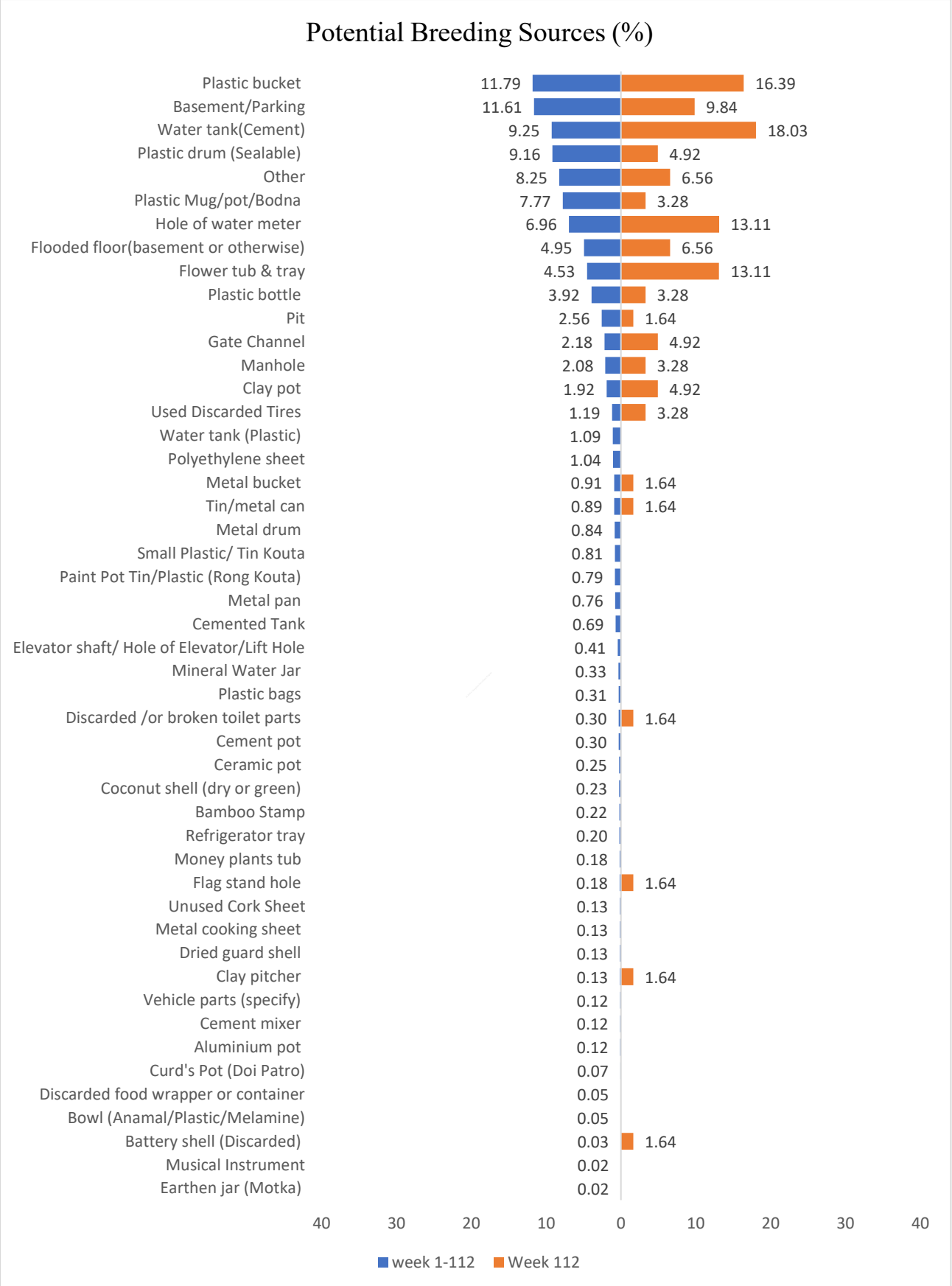


Fig. 11: Container Frequency for *Aedes* mosquitoes in Zones (1-5)

Table 6: Container Productivity of *Aedes* mosquito in DNCC from Week 1 to Week 112 (May 2, 2024 – July 28, 2026)

Container	Frequency	Total Estimated Aedes Larvae	Percentage of contribution (%)	Relative productivity index	CCPI
Plastic drum (Sealable)	200	41084	24.50	1.00	1.00
Water tank (Cement)	127	18625	11.11	0.45	0.53
Flooded floor (basement or otherwise)	116	16679	9.95	0.41	0.48
Basement/Parking	192	13826	8.25	0.34	0.59
Plastic bucket	185	12259	7.31	0.30	0.55
Plastic bottle	61	8570	5.11	0.21	0.25
Pit	43	6847	4.08	0.17	0.19
Hole of water meter	76	5910	3.52	0.14	0.24
Plastic Mug/pot/Bodna	133	5116	3.05	0.12	0.34
Flower tub & tray	91	3948	2.35	0.10	0.24
Plastic pipe	80	3668	2.19	0.09	0.21
Clay pot	79	2994	1.79	0.07	0.20
Used Discarded Tires	29	2724	1.62	0.07	0.10
Money plants tub	5	2675	1.60	0.07	0.05
Cemented Tank	15	2248	1.34	0.05	0.06
Other	62	1973	1.18	0.05	0.15
Water tank (Plastic)	17	1919	1.14	0.05	0.06
Manhole	39	1764	1.05	0.04	0.10
Elevator shaft/ Hole of Elevator/Lift Hole	3	1294	0.77	0.03	0.02
Polyethylene sheet	30	1289	0.77	0.03	0.08
Tin/metal can	17	1468	0.88	0.04	0.06
Metal bucket	22	1180	0.70	0.03	0.06
Gate Channel	35	1114	0.66	0.03	0.09
Paint Pot Tin/Plastic (Rong Kouta)	23	1070	0.64	0.03	0.06
Cement pot	14	1067	0.64	0.03	0.04
Muddy land	3	754	0.45	0.02	0.02
Metal drum	16	639	0.38	0.02	0.04
Ceramic pot	10	504	0.30	0.01	0.03
Small Plastic/ Tin Kouta	15	503	0.30	0.01	0.04
Drain	6	476	0.28	0.01	0.02
Metal pan	8	401	0.24	0.01	0.02
Discarded /or broken toilet parts	9	317	0.19	0.01	0.02
Dried guard shell	4	307	0.18	0.01	0.01
Bamboo Stamp	8	291	0.17	0.01	0.02
Unused Cork Sheet	5	283	0.17	0.01	0.01
Curd's Pot (Doi Patro)	3	224	0.13	0.01	0.01

Tree Hole	5	183	0.11	0.00	0.01
Refrigerator tray	5	153	0.09	0.00	0.01
Mineral Water Jar	3	144	0.09	0.00	0.01
Bowl (Anamal/Plastic/Mela-mine)	2	142	0.08	0.00	0.01
Plastic outgoing pipe	4	136	0.08	0.00	0.01
Flag stand hole	5	139	0.08	0.00	0.01
Vehicle parts (specify)	3	100	0.06	0.00	0.01
Plastic bags	5	97	0.06	0.00	0.01
Clay pitcher	3	90	0.05	0.00	0.01
Coconut shell (dry or green)	5	88	0.05	0.00	0.01
Aluminium pot	3	67	0.04	0.00	0.01
Mineral Water Jar	3	63	0.04	0.00	0.01
Metal cooking sheet	2	19	0.01	0.00	0.00

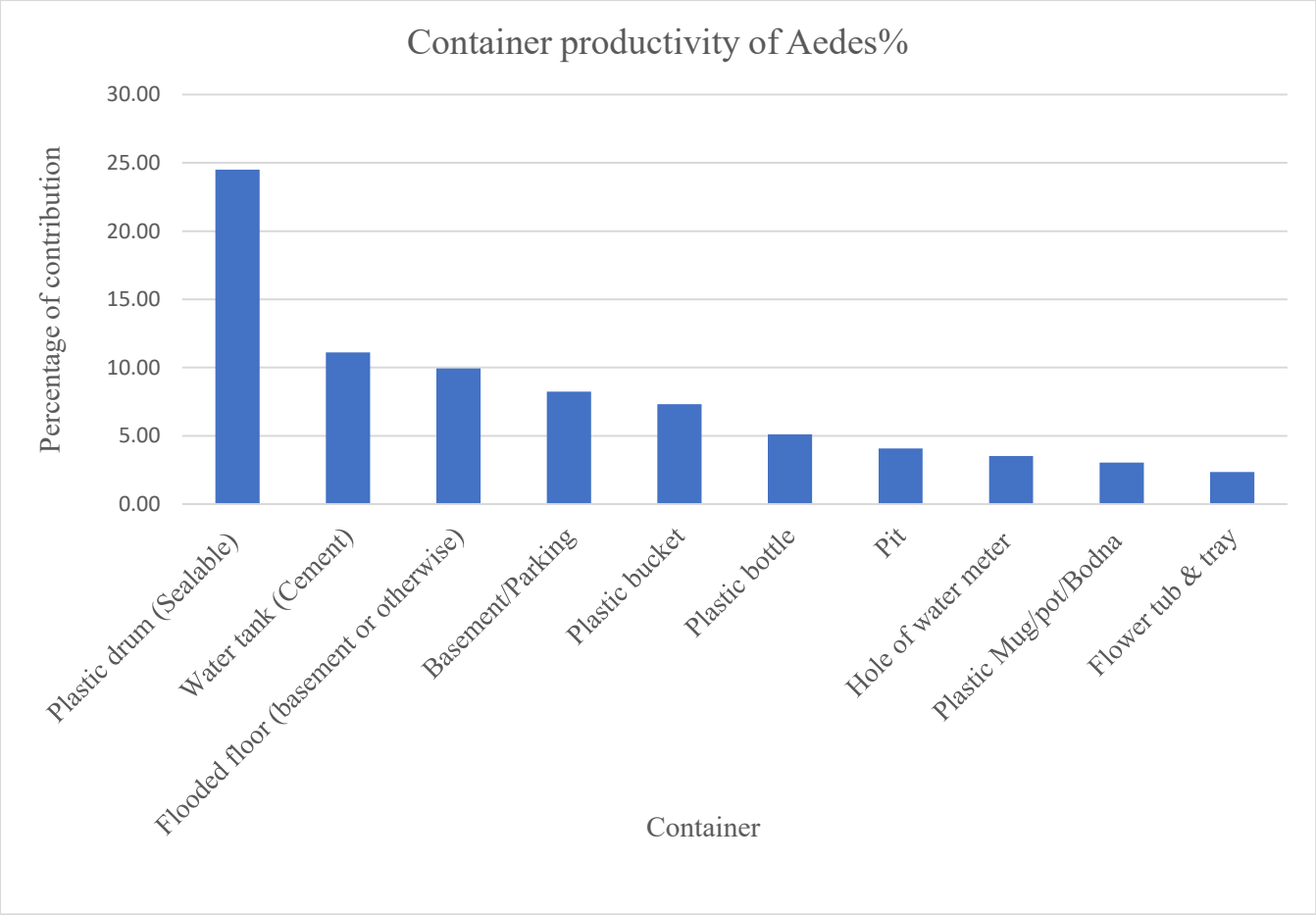


Fig 12: Major container types contributing to Aedes larval production in DNCC from Week 1 to Week 112 (May 2, 2024 – July 28, 2026)

Table 7: Container Productivity of *Aedes* mosquito in DNCC in Week 112 (July 24-28, 2026)

Container	Frequency	Total Aedes Larvae	Percentage of contribution (%)	Relative productivity index	CCPI
Basement/Parking	3	331	30.59	1.00	0.80
Plastic bucket	6	243	22.46	0.73	0.84
Tin/metal can	1	234	21.63	0.71	0.49
Flower tub & tray	3	192	17.74	0.58	0.55
Flooded floor (basement or otherwise)	1	32	2.96	0.10	0.12
Clay pot	1	21	1.94	0.06	0.10
Flag stand hole	1	8	0.74	0.02	0.08
Plastic drum (Sealable)	1	8	0.74	0.02	0.08
Plastic Mug/pot/Bodna	1	8	0.74	0.02	0.08
Used Discarded Tires	1	5	0.46	0.02	0.08

Table 8: Container Frequency & Probable potential Wet Container in zones (1-5) from Week 1 to Week 112 (May 2, 2024 – July 28, 2026)

Sources	+House	-WC	+WC	**Total WC**	% WC	% PWC
Plastic bucket	242	287	426	713	11.79	9.23
Basement/Parking	243	67	635	702	11.61	13.76
Water tank (Cement)	174	256	303	559	9.25	6.56
Plastic drum (Sealable)	258	83	471	554	9.16	10.20
Other	236	138	361	499	8.25	7.82
Plastic Mug/pot/Bodna	195	95	375	470	7.77	8.12
Hole of water meter	84	29	392	421	6.96	8.49
Flooded floor (basement or otherwise)	135	153	146	299	4.95	3.16
Flower tub & tray	103	32	242	274	4.53	5.24
Plastic bottle	91	64	173	237	3.92	3.75
Pit	75	23	132	155	2.56	2.86
Gate Channel	42	34	98	132	2.18	2.12
Manhole	61	43	83	126	2.08	1.80
Clay pot	93	11	105	116	1.92	2.27
Used Discarded Tires	38	19	53	72	1.19	1.15
Water tank (Plastic)	21	28	38	66	1.09	0.82
Polyethylene sheet	40	3	60	63	1.04	1.30

Metal bucket	27	6	49	55	0.91	1.06
Tin/metal can	32	0	54	54	0.89	1.17
Metal drum	20	8	43	51	0.84	0.93
Small Plastic/ Tin Kouta	24	9	40	49	0.81	0.87
Paint Pot Tin/Plastic (Rong Kouta)	30	5	43	48	0.79	0.93
Metal pan	17	3	43	46	0.76	0.93
Cemented Tank	22	13	29	42	0.69	0.63
Elevator shaft/ Hole of Elevator/Lift Hole	8	4	21	25	0.41	0.45
Mineral Water Jar	7	4	16	20	0.33	0.35
Plastic bags	8	2	17	19	0.31	0.37
Cement pot	11	3	15	18	0.30	0.32
Discarded /or broken toilet parts	12	3	15	18	0.30	0.32
Ceramic pot	13	0	15	15	0.25	0.32
Coconut shell (dry or green)	4	0	14	14	0.23	0.30
Bamboo Stamp	9	0	13	13	0.22	0.28
Refrigerator tray	9	0	12	12	0.20	0.26
Flag stand hole	7	1	10	11	0.18	0.22
Money plants tub	8	0	11	11	0.18	0.24
Clay pitcher	6	1	7	8	0.13	0.15
Dried guard shell	5	0	8	8	0.13	0.17
Metal cooking sheet	2	0	8	8	0.13	0.17
Unused Cork Sheet	6	1	7	8	0.13	0.15
Aluminium pot	4	0	7	7	0.12	0.15
Cement mixer	2	0	7	7	0.12	0.15
Vehicle parts (specify)	5	1	6	7	0.12	0.13
Curd's Pot (Doi Patro)	3	0	4	4	0.07	0.09
Bowl (Anamal/Plastic/Melamine)	3	0	3	3	0.05	0.06
Discarded food wrapper or container	1	1	2	3	0.05	0.04
Battery shell (Discarded)	0	0	2	2	0.03	0.04

Table 9: Percentage of breeding sources in different zone from Week 1 to Week 112 (May 2, 2024 – July 28, 2026)

Containers	Percentage of Breeding Sources				
	Zone 01	Zone 02	Zone 03	Zone 04	Zone 05
Plastic bucket	2.10	2.12	2.17	2.96	2.45
Basement/Parking	2.96	1.69	3.08	1.19	2.70
Water tank (Cement)	1.21	1.54	1.19	2.66	2.65
Plastic drum (Sealable)	1.27	2.28	1.54	2.12	1.95
Other	2.66	1.47	2.25	0.69	1.17
Plastic Mug/pot/Bodna	1.44	1.29	1.51	2.15	1.39
Hole of water meter	0.81	1.26	0.43	2.17	2.30
Flooded floor (basement or otherwise)	1.21	1.19	0.78	0.60	1.17
Flower tub & tray	1.22	0.61	1.57	0.78	0.35
Plastic bottle	0.51	0.91	0.56	1.06	0.88
Pit	0.65	0.36	0.86	0.31	0.38
Gate Channel	0.88	0.20	0.58	0.07	0.46
Manhole	0.73	0.20	0.71	0.23	0.22
Clay pot	0.30	0.35	0.55	0.28	0.45
Used Discarded Tires	0.40	0.33	0.18	0.13	0.15
Water tank (Plastic)	0.00	0.68	0.15	0.13	0.13
Polyethylene sheet	0.28	0.26	0.22	0.20	0.08
Metal bucket	0.17	0.10	0.25	0.23	0.17
Tin/metal can	0.26	0.23	0.18	0.17	0.05
Metal drum	0.17	0.13	0.18	0.25	0.12
Small Plastic/ Tin Kouta	0.22	0.15	0.23	0.10	0.12
Paint Pot Tin/Plastic (Rong Kouta)	0.18	0.08	0.23	0.18	0.12
Metal pan	0.15	0.17	0.23	0.08	0.13
Cemented Tank	0.13	0.10	0.17	0.20	0.10
Elevator shaft/ Hole of Elevator/Lift Hole	0.18	0.10	0.07	0.00	0.07
Mineral Water Jar	0.05	0.02	0.05	0.15	0.07
Plastic bags	0.03	0.02	0.07	0.12	0.08
Cement pot	0.05	0.02	0.10	0.02	0.12
Discarded /or broken toilet parts	0.03	0.13	0.03	0.00	0.10
Ceramic pot	0.07	0.02	0.05	0.02	0.10
Coconut shell (dry or green)	0.05	0.07	0.05	0.03	0.03
Bamboo Stamp	0.05	0.08	0.03	0.05	0.00
Refrigerator tray	0.07	0.03	0.05	0.03	0.02
Money plants tub	0.08	0.02	0.05	0.00	0.03
Flag stand hole	0.05	0.03	0.05	0.00	0.05
Dried guard shell	0.05	0.00	0.03	0.03	0.02
Metal cooking sheet	0.03	0.02	0.07	0.00	0.02
Unused Cork Sheet	0.00	0.02	0.05	0.03	0.03
Aluminium pot	0.00	0.02	0.03	0.03	0.05
Cement mixer	0.02	0.03	0.00	0.05	0.02
Clay pitcher	0.00	0.03	0.03	0.02	0.03
Vehicle parts (specify)	0.02	0.00	0.05	0.03	0.02
Curd's Pot (Doi Patro)	0.02	0.02	0.03	0.00	0.00
Bowl (Anamal/Plastic/Melamine)	0.02	0.02	0.00	0.02	0.00
Discarded food wrapper or container	0.00	0.00	0.03	0.00	0.02
Battery shell (Discarded)	0.00	0.00	0.00	0.02	0.02

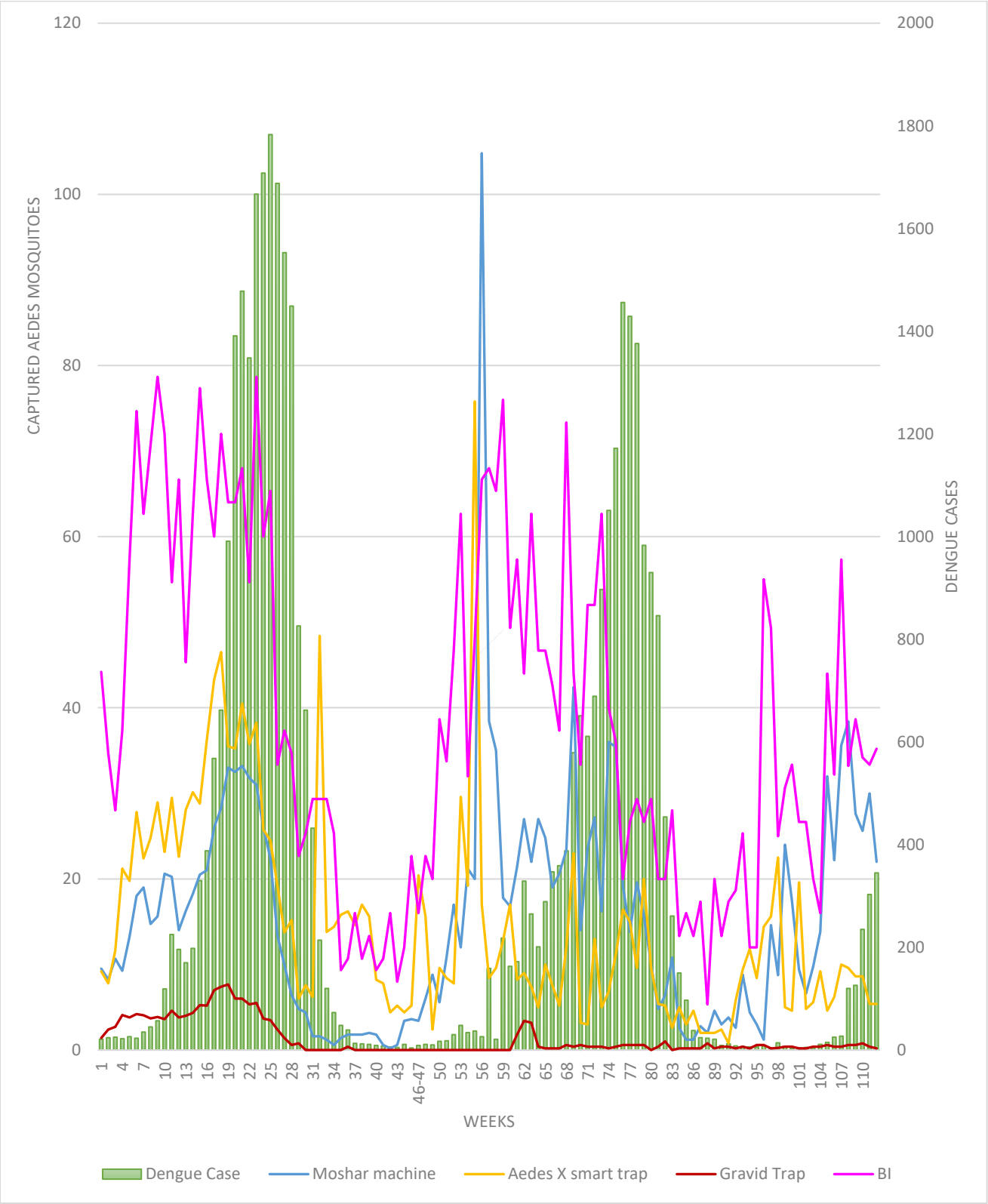


Fig. 13: Correlation between Dengue Cases and *Aedes* Mosquitoes Captured by per Moshar Machine CO_2 traps, Aedes X smart traps, and Gravid traps

NB: DNCC dengue cases only

Photographs of Mosquitoes Surveillance










Samples Collection from Field





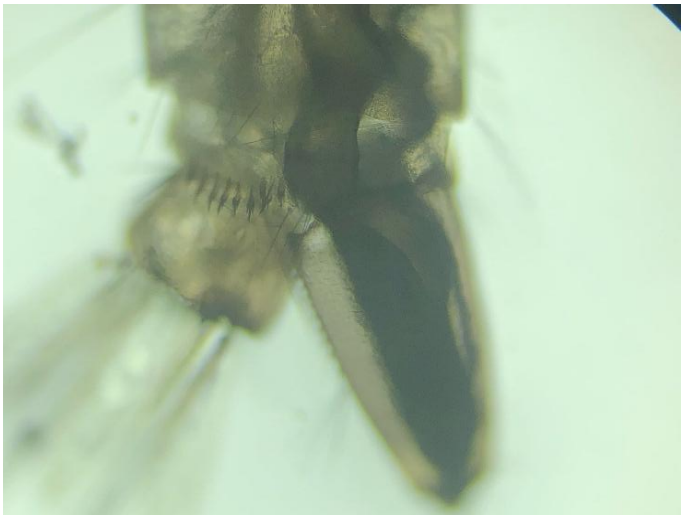



Samples Processing and Identification















Comments:
The mosquito density is decreased and the dengue cases increasing rapidly. The Breteau Index (BI) is increased in week 112. 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):

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2. Secretary, Dhaka North City Corporation
3. PS to Administrator, Dhaka North City Corporation
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