Weekly Report on

JU-DNCC Mosquitoes Surveillance Program

Week 111 (July 17-21, 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.

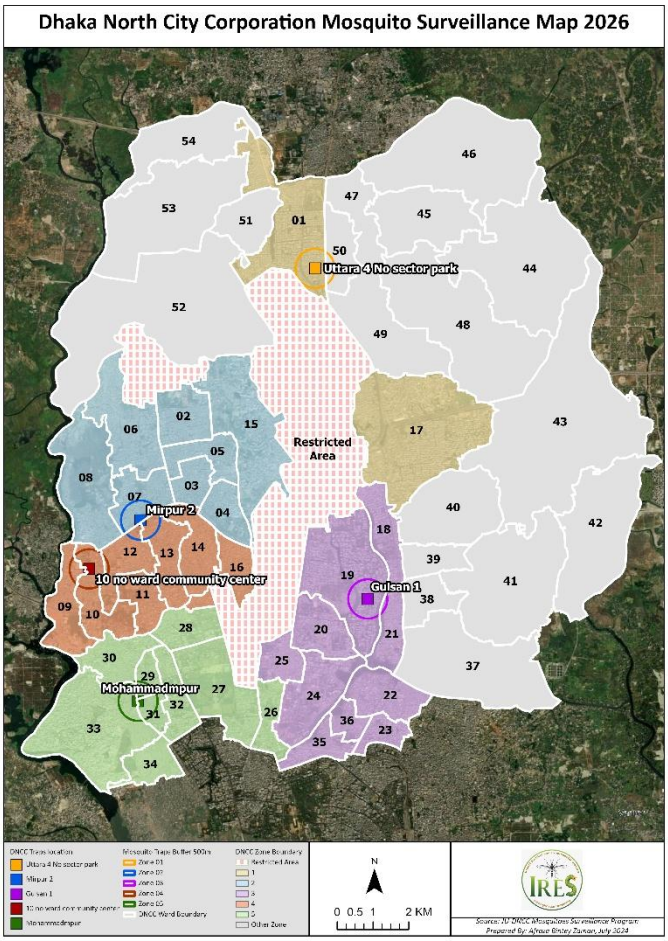
Zone	Traps Location	GPS Location
01	Uttara-4 No sector park	23.8613672,90.4035528
02	Mirpur-2, Vander office, DNCC	23.8036248,90.3601995
03	Gulsan 1, Purantan Vander office	23.7860557,90.4164024
04	10 No ward community center, Mirpur-1	23.7922967,90.3467992
05	Mohammadpur regional office of DNCC	23.7618721,90.3590884

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 111 (July 17-21, 2026)

Zone	*Ae. aegypti*	*Ae. albopictus*	*Cx. quinquefasciatus*	*Cx. tritaeniorhynchus*	*Cx. gelidus*	*Ar. subalbatus*	*Mn. annulifera*	*Mn. uniformis*	Total	%
1	18	5	1117	265	126	21	1	3	1556	12.67
2	6	0	162	56	0	8	0	0	232	1.89
3	32	6	965	247	0	12	0	1	1263	10.28
4	32	6	5676	1242	0	86	0	0	7042	57.34
5	37	8	1685	443	0	16	0	0	2189	17.82
Total	125	25	9605	2253	126	143	1	4	12282	100.00
%	1.02	0.20	78.20	18.34	1.03	1.16	0.01	0.03	100.00	

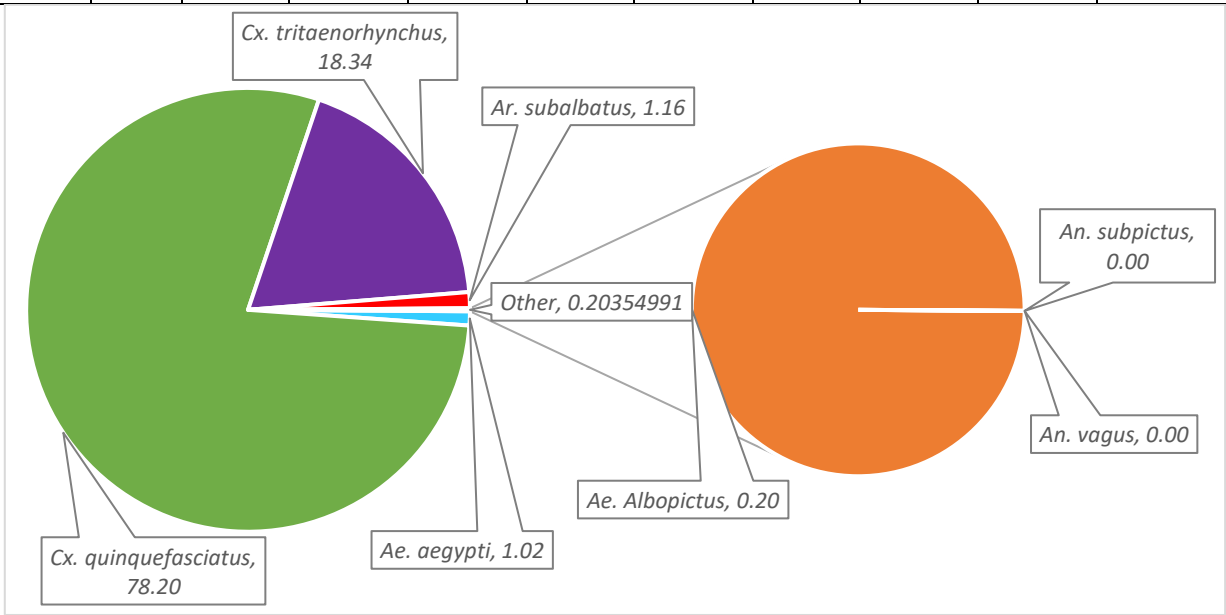


Fig. 1: Percentage of Adult Mosquitoes Collected by Moshar Machine (CO_2) traps in Week 111 (July 17-21, 2026)

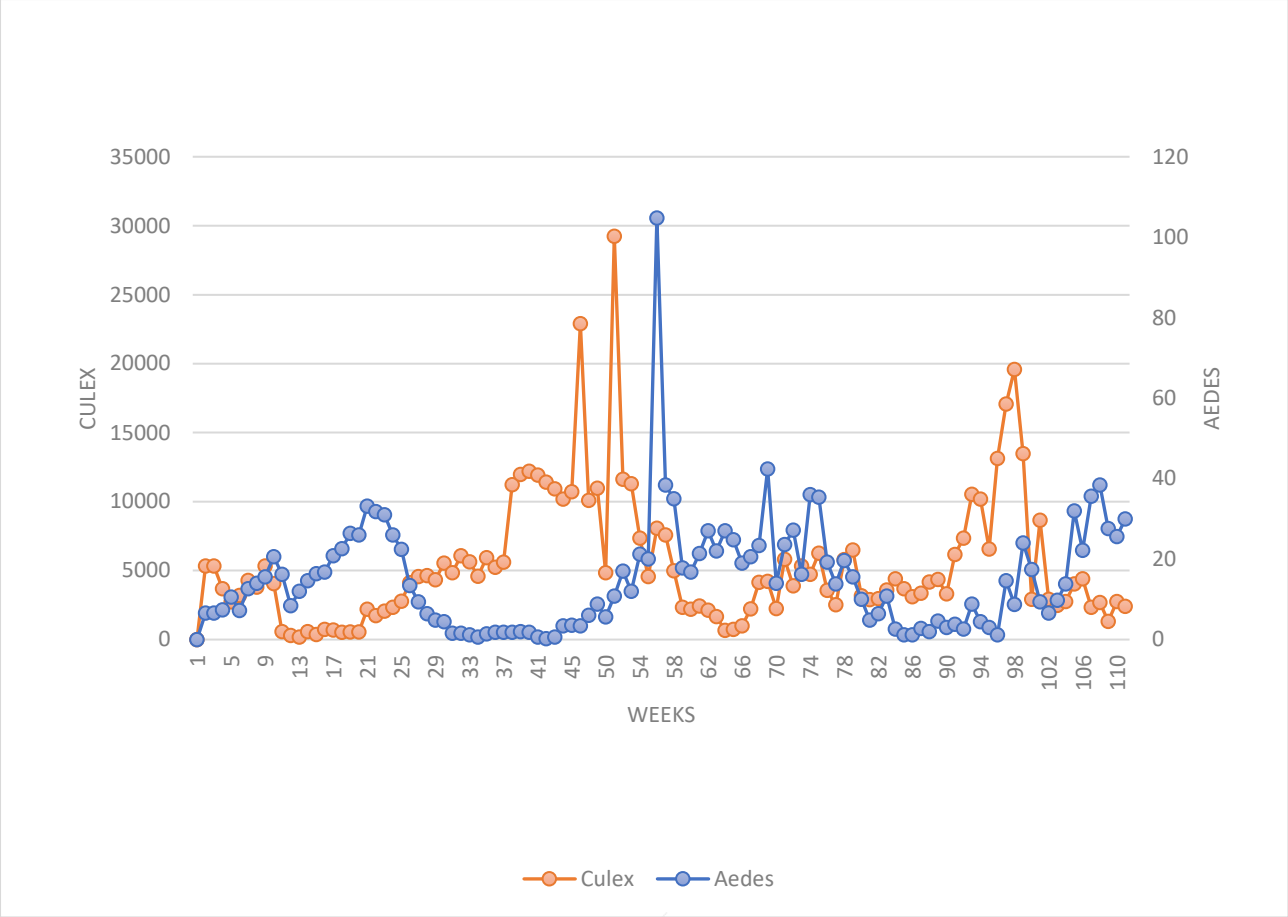


Fig 2: Average number of mosquitoes per Moshar Machine (CO_2) traps from Week 1 to Week 111 (May 2, 2024 – July 21, 2026)

Table 2. Collected Mosquito Larvae from *Aedes* X smart Traps in Week 111 (July 17-21, 2026)

Zone	N	*Ae. aegypti*	*Ae. albopictus*
1	12	0	12
2	7	7	0
3	0	0	0
4	8	0	8
5	0	0	0
Total	27	7	20
(%)	100.00	25.93	74.07

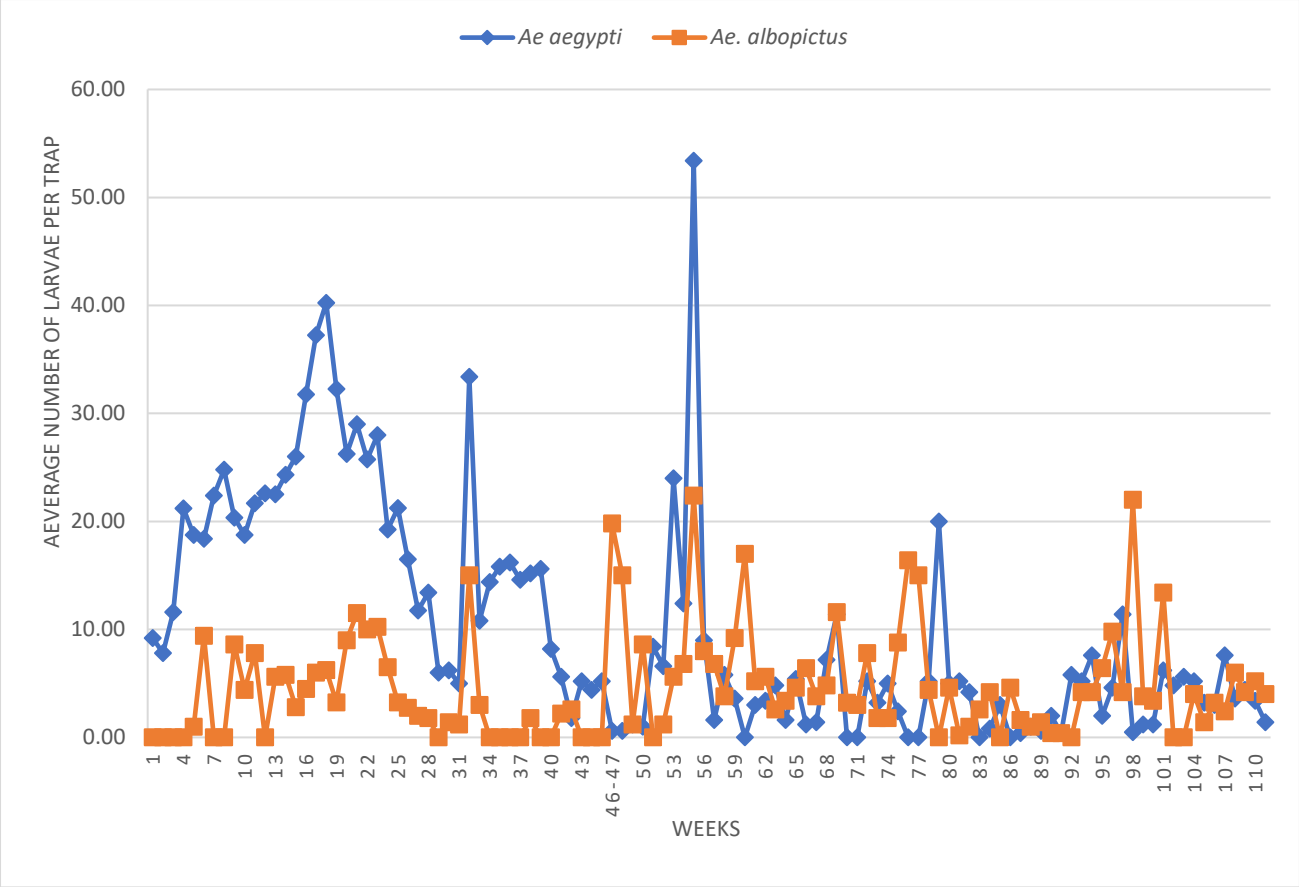


Fig 3: Average Number of *Aedes* Larvae per *Aedes* X Smart Trap in Zones 1-5 from Week 1 to Week 111 (May 2, 2024 – July 21, 2026)

Table 3. Collected Adult Mosquitoes from Gravid Trap in Week 111 (July 17-21, 2026)

Zone	Number of Mosquitoes	*Ae. aegypti*	*Ae. albopictus*	*Cx. quinquefasciatus*
1	3	0	2	1
2	1	1	0	0
3	3	0	2	1
4	1	1	0	0
5	3	0	2	1
Total	11	2	6	3
(%)	100.00	18.18	54.55	27.27

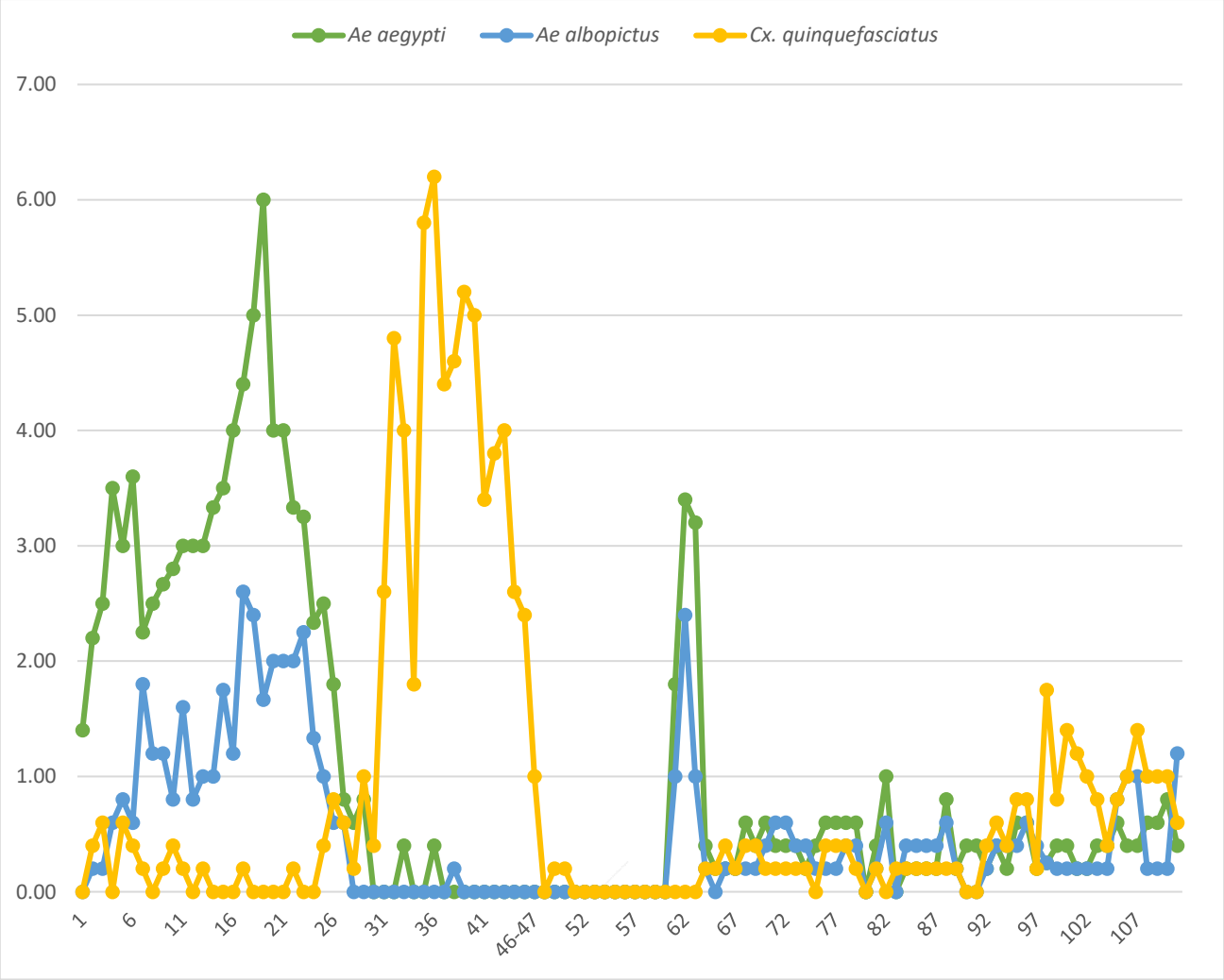


Fig 4: Average number of adult mosquitoes per Gravid trap in zones 1-5 from Week 1 to Week 111 (May 2, 2024 – July 21, 2026)

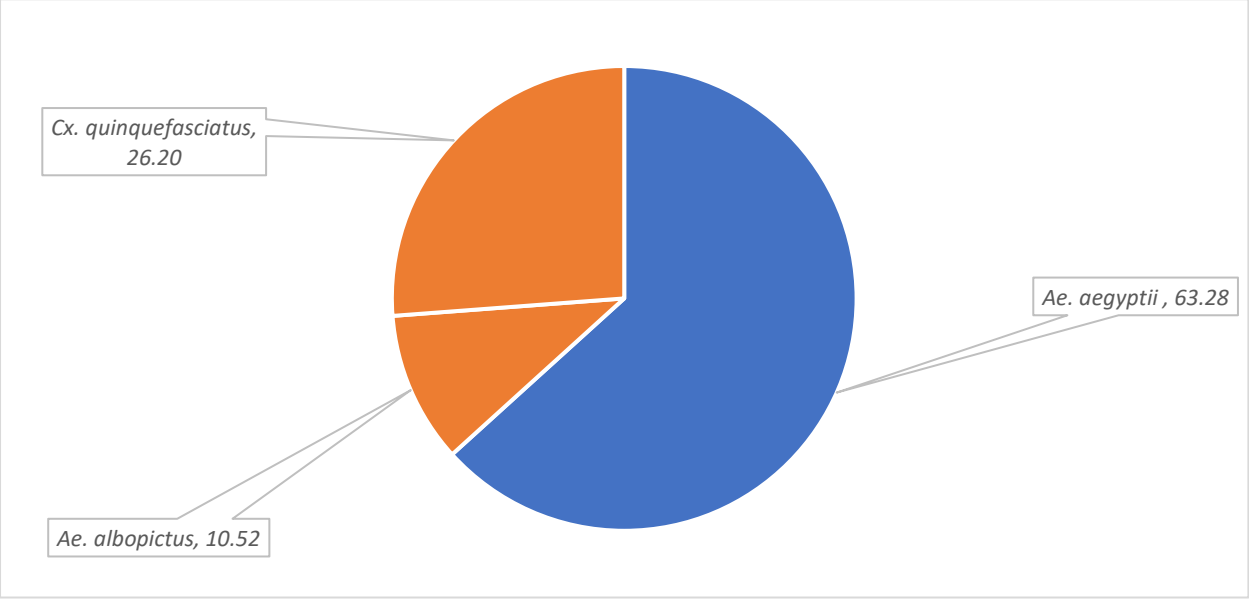


Fig. 5: Percentage of Mosquito Larvae from Zones (1-5) in Week 111 (July 17-21, 2026)

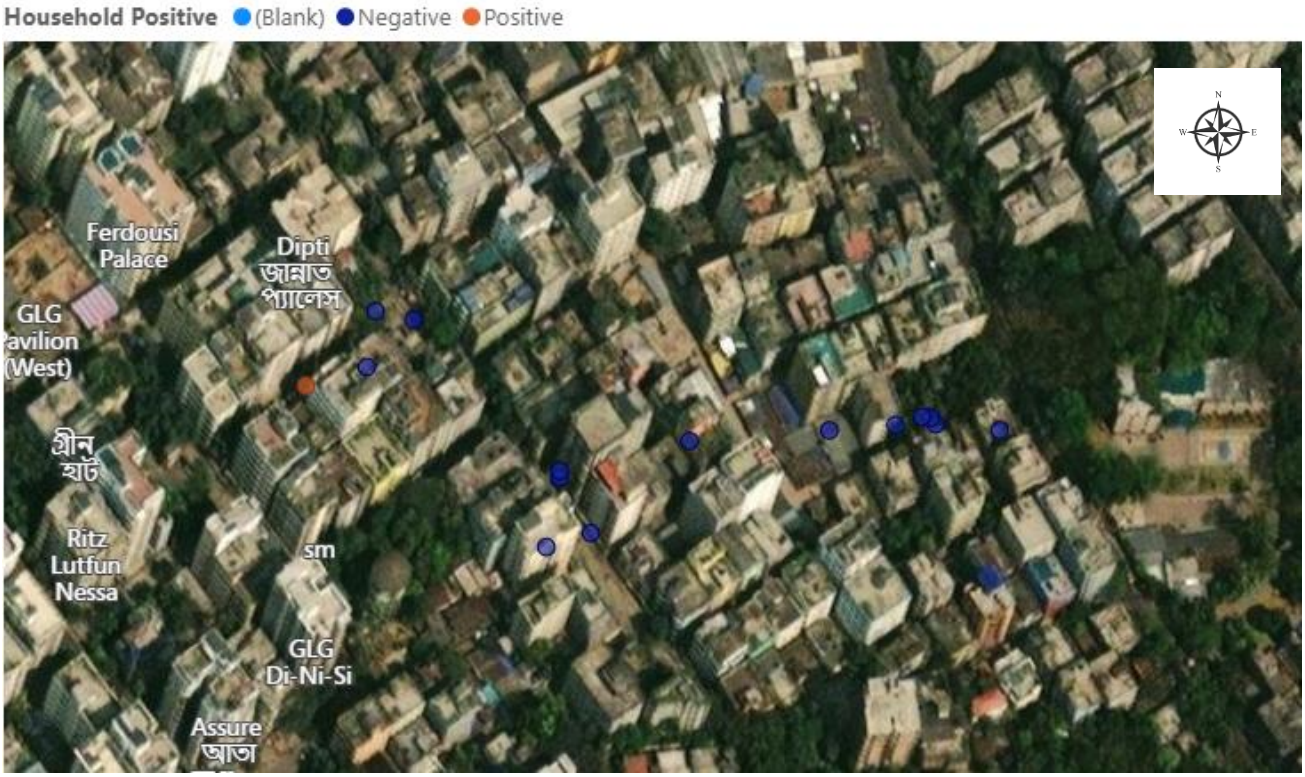
Table 4. Positive Larval Spots in Different Zones (1-5) with Estimated Number of Larvae in Week 111 (July 17-21, 2026)

Zone	GPS Location	*Ae. aegypti*	*Ae. albopictus*	*Cx. quinquefasciatus*	*Source*
1	23.8604561 90.4014269	52	0	0	Used Discarded Tires
	23.8601438 90.402385	52	0	0	Basement/Parking
	23.86034 90.4025022	123	0	0	Plastic bucket
	23.8606039 90.4019389	0	25	0	Gate Channel
	23.8598456 90.4019998	0	0	568	Basement/Parking
	23.8595976 90.3574746	0	52	0	Used Discarded Tires
	total	227	77	568	
2	23.8062277 90.4165803	10	0	0	Flooded floor (basement or otherwise)
	total	10	0	0	
3	23.7857885 90.4164347	35	0	0	Metal bucket
	23.7869114 90.4158549	52	0	0	Metal bucket
	23.7875102 90.4156616	25	0	0	plastic pipe
	23.7876416 90.4155537	0	23	0	Flower tub & tray
	23.7875206 90.415328	245	0	0	Hole of water meter
	23.7874417 90.4146678	254	0	0	Metal bucket
	23.7874987 90.3476114	234	0	0	Hole of water meter
	total	845	23	0	

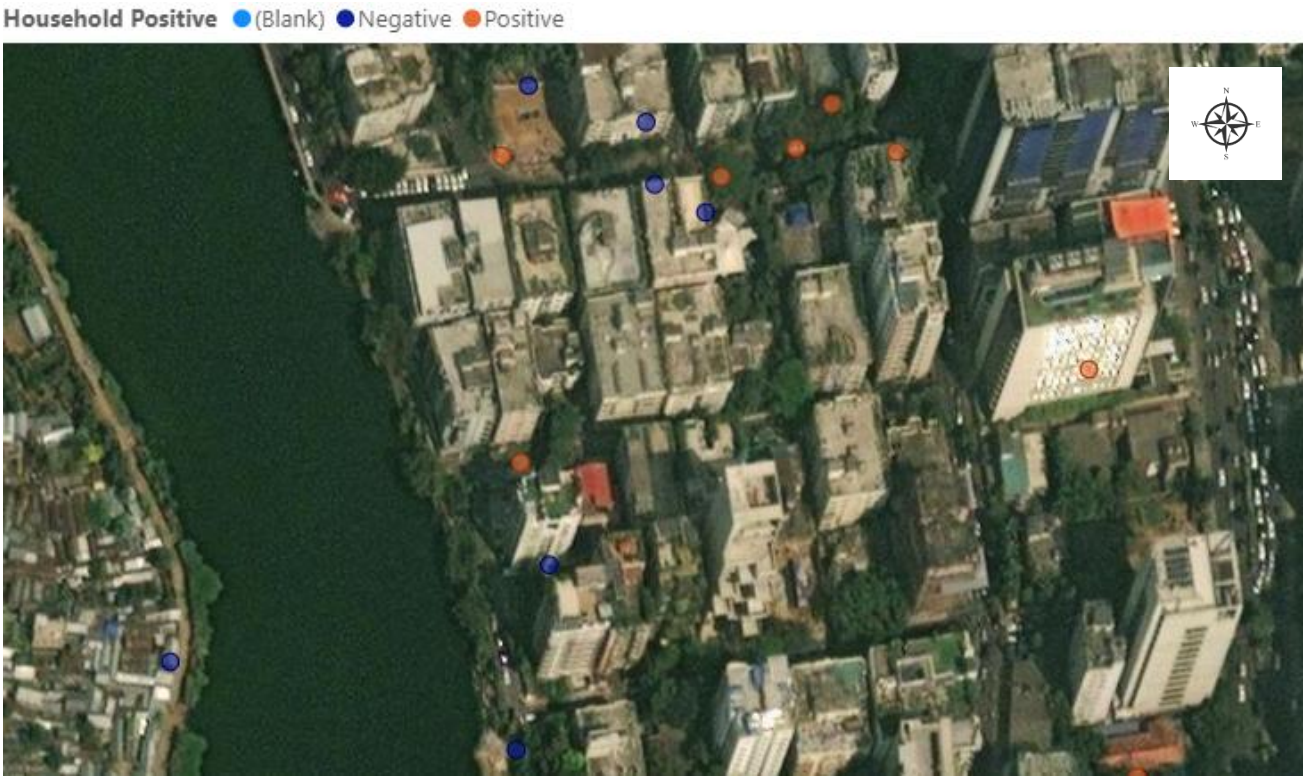
4	23.78904 90.3473309	25	0	0	Plastic drum (Sealable)
	23.7894733 90.3461759	0	128	0	Plastic bucket
	23.7896182 90.358516	15	0	0	Plastic drum (Sealable)
	total	40	128	0	
5	23.7613059 90.358516	250	0	0	Plastic drum (Sealable)
	total	250	0	0	
Grand Total		1372	228	568	



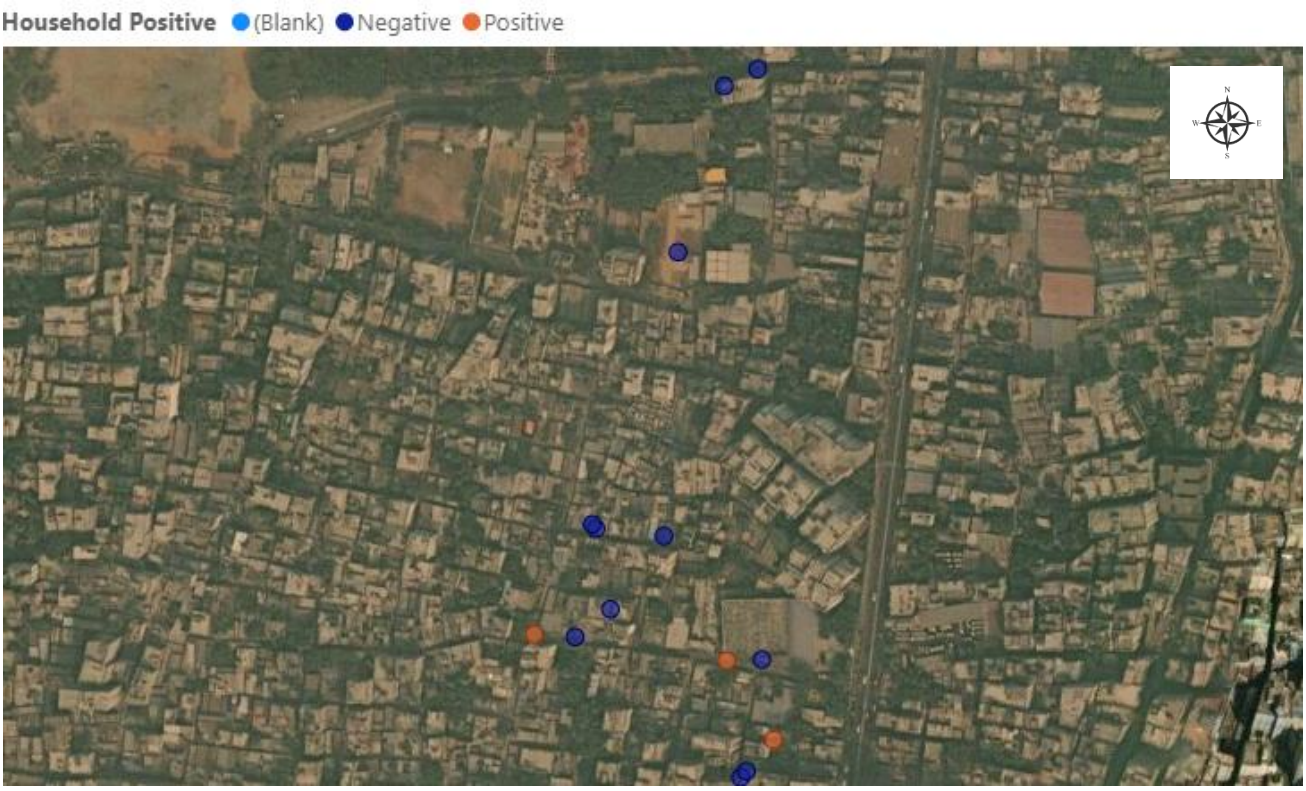
Map 1: Positive and Negative House of Uttara 4 No. Sector at Weeks 111



Map 2: Positive and Negative House of Mirpur 2 at Weeks 111



Map 3: Positive and Negative House of Gulshan 1 at Weeks 111



Map 4: Positive and Negative House of Mirpur 1 at Weeks 111



Map 5: Positive and Negative House of Mohammadpur at Weeks 111

Table 5: Positive House, Wet Container, BI, CI and HI in Zones (1-5) in Week 111 (July 17-21, 2026)

Zone	Total House	Positive House	Total Wet container	Positive Wet Container	BI	CI	HI
1	15	7	58	8	53.33	13.79	46.67
2	15	1	34	2	13.33	5.88	6.67
3	15	7	65	8	53.33	12.31	46.67
4	15	3	62	5	33.33	8.06	20.00
5	15	1	34	2	13.33	5.88	6.67

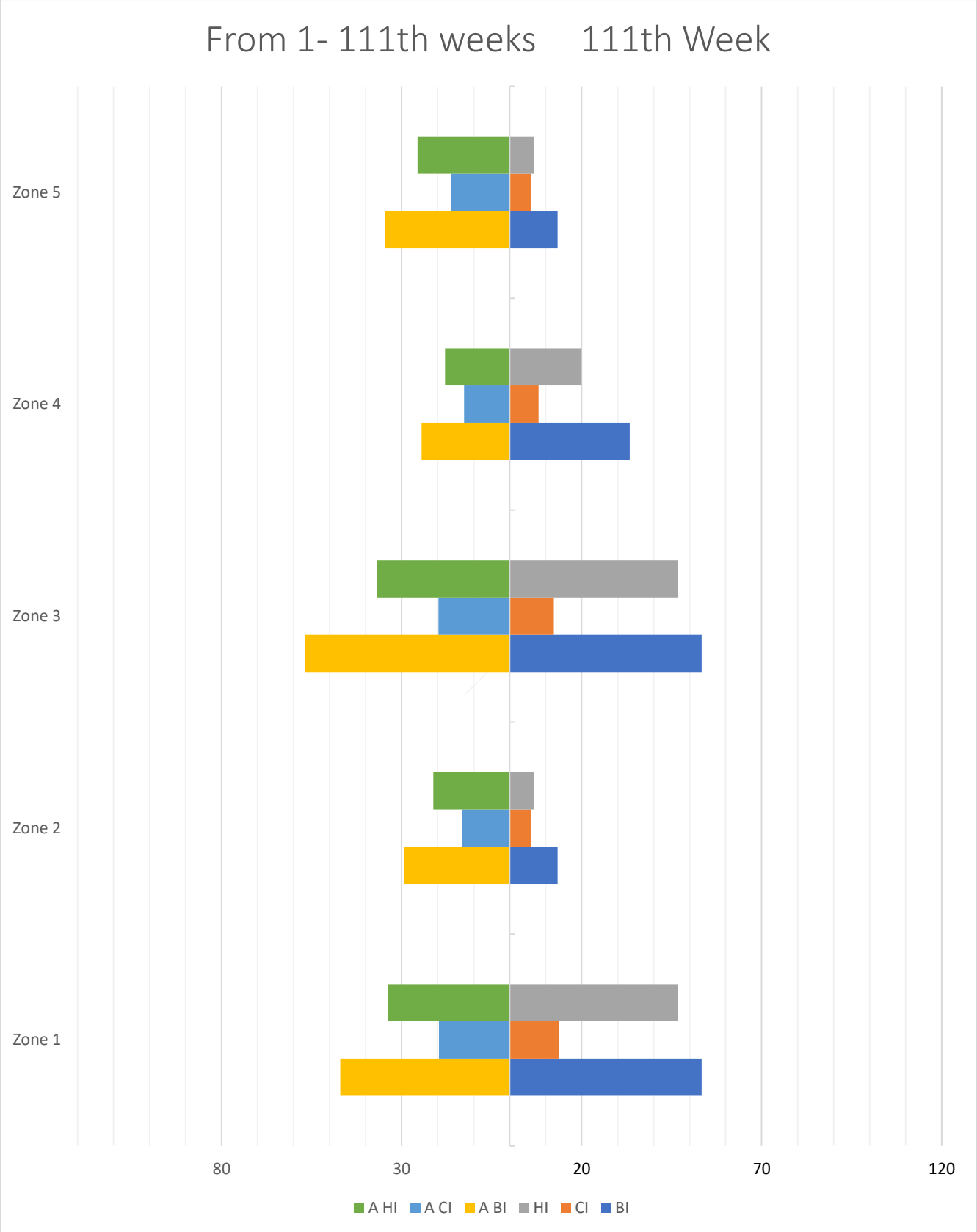


Fig. 6: BI, CI and HI in Different Zones (1-5) of Dhaka north City Corporation

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

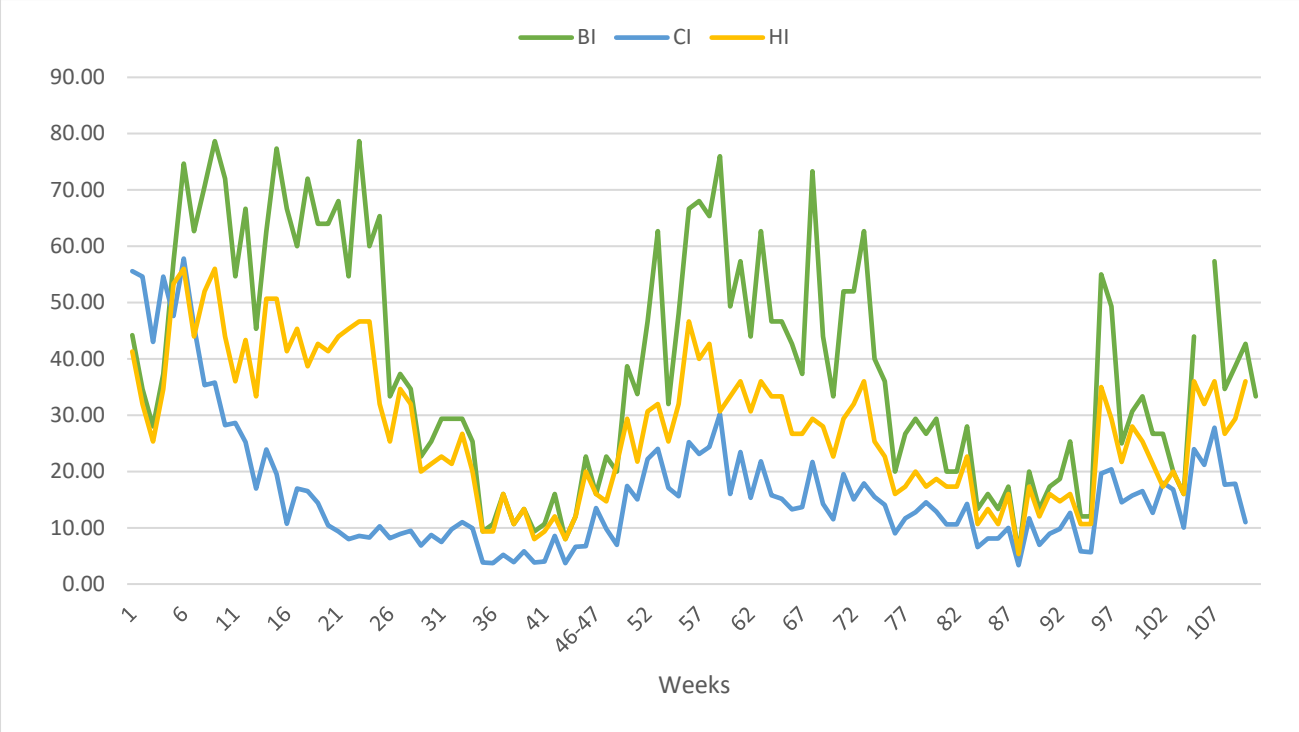


Fig 7: Mosquitoes population fluctuation (BI, CI, HI) from Week 1 to Week 111 (May 2, 2024 – July 21, 2026)

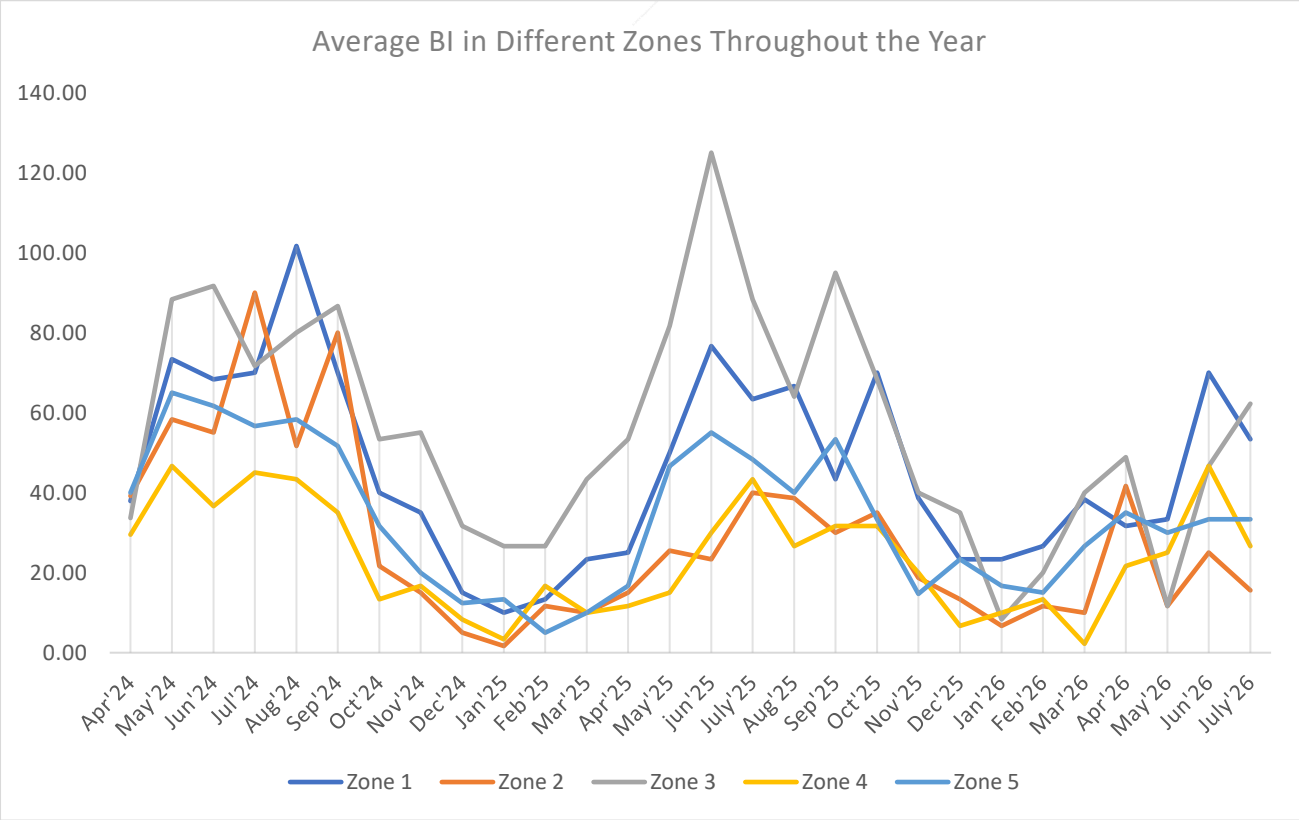


Fig. 8: Breteau Index (BI) in Different Zones from Week 1 to Week 111 (May 2, 2024 – July 21, 2026)

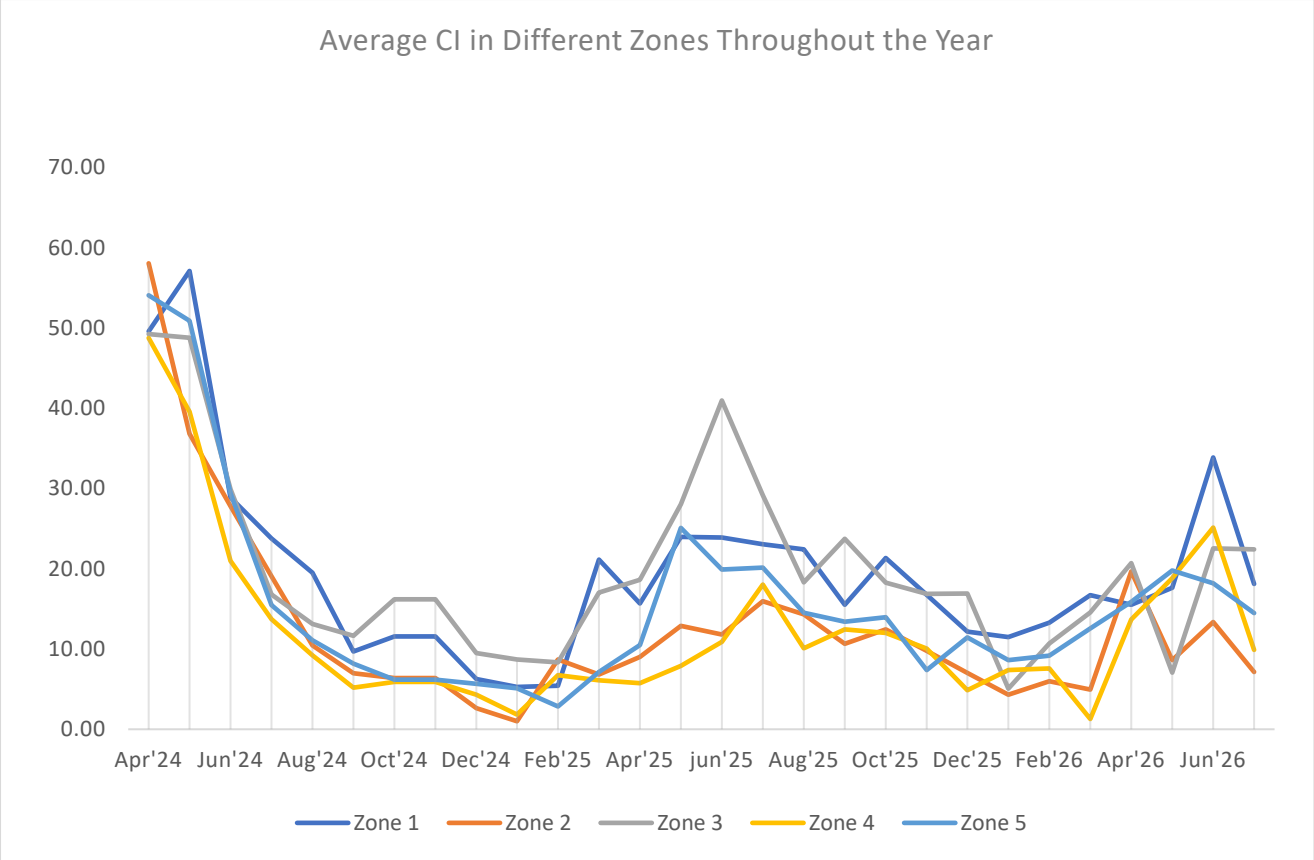


Fig. 9: Container Index (CI) in Different Zones from Week 1 to Week 111 (May 2, 2024 – July 21, 2026)

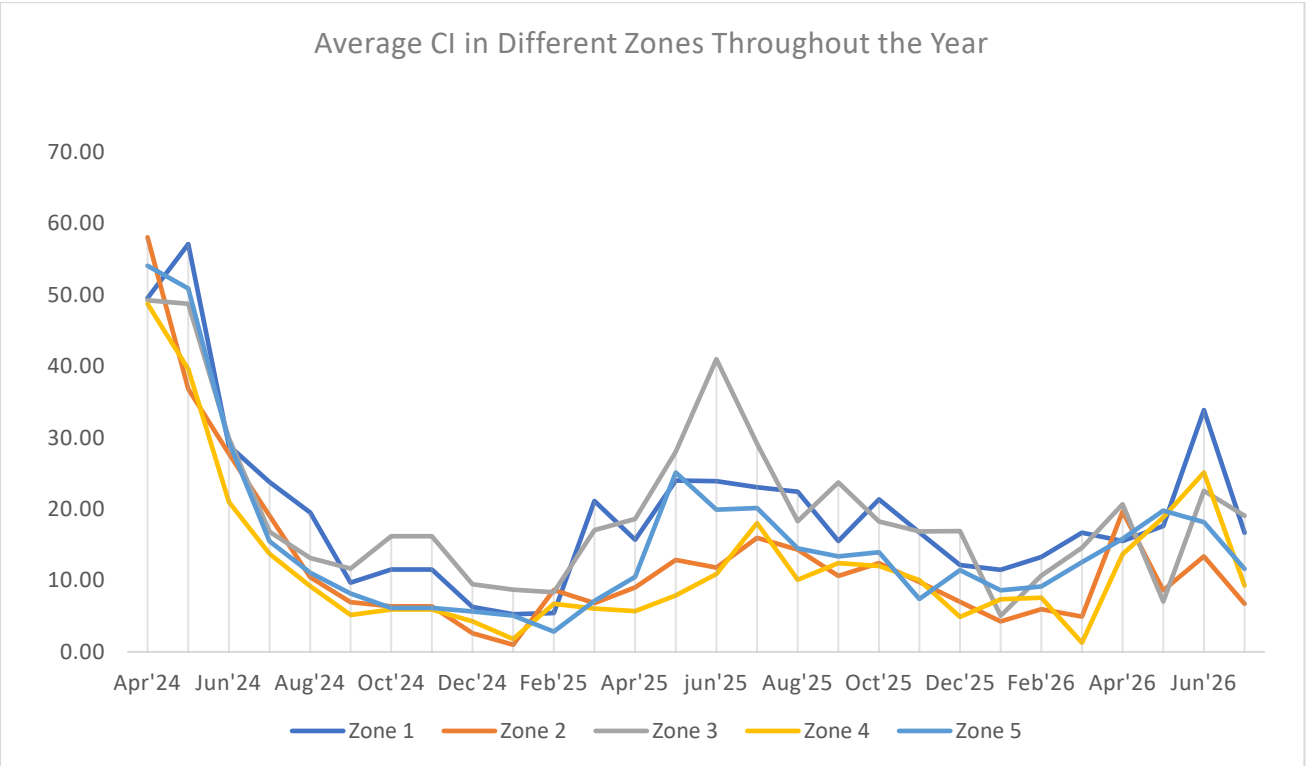


Fig. 10: House Index (HI) in Different Zones from Week 1 to Week 111 (May 2, 2024 – July 21, 2026)

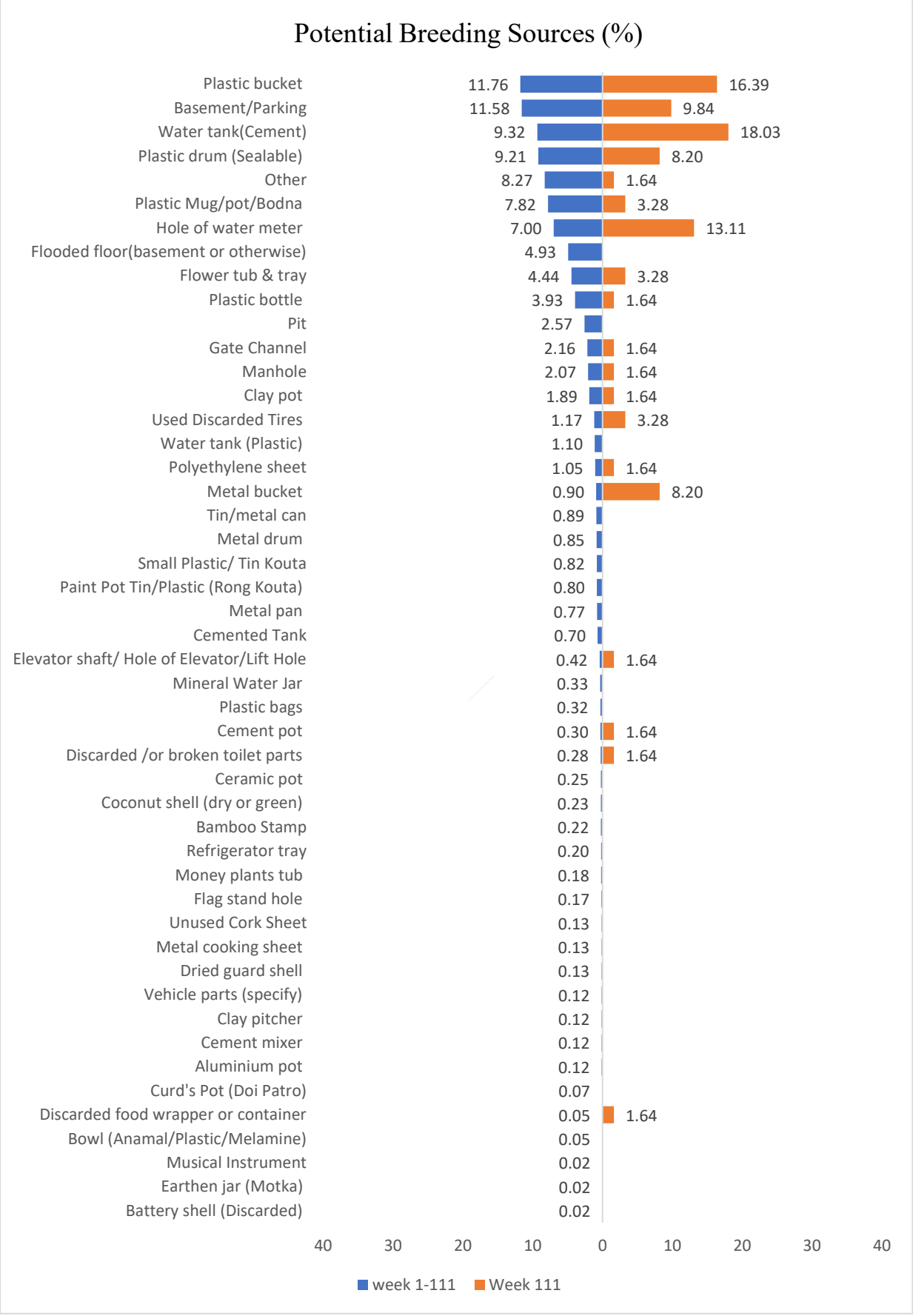


Fig. 11: Container Frequency for *Aedes* mosquitoes in Zones (1-5)

Table 6: Container Productivity of *Aedes* mosquito in DNCC from Week 1 to Week 111 (May 2, 2024 – July 21, 2026)

Row Labels	Frequency	Total Esti-mated Aedes Larvae	Productivity	Productivity (%)
Money plants tub	5	2675	535.00	12.66
Elevator shaft/ Hole of Elevator/Lift Hole	3	1294	431.33	10.21
Muddy land	3	754	251.33	5.95
Plastic drum (Sealable)	199	41077	206.42	4.88
Pit	43	6847	159.23	3.77
Cemented Tank	15	2248	149.87	3.55
Water tank (Cement)	127	18625	146.65	3.47
Flooded floor (basement or other-wise)	115	16647	144.76	3.42
Plastic bottle	61	8570	140.49	3.32
Plastic bucket	2	251	125.50	2.97
Water tank (Plastic)	17	1919	112.88	2.67
Used Discarded Tires	28	2719	97.11	2.30
Drain	6	476	79.33	1.88
Hole of water meter	76	5910	77.76	1.84
Tin/metal can	16	1234	77.13	1.82
Dried guard shell	4	307	76.75	1.82
Cement pot	14	1067	76.21	1.80
Curd's Pot (Doi Patro)	3	224	74.67	1.77
Basement/Parking	189	13495	71.40	1.69
Bowl (Anamal/Plastic/Melamine)	2	142	71.00	1.68
Plastic bucket	179	12016	67.13	1.59
Unused Cork Sheet	5	283	56.60	1.34
Metal bucket	22	1180	53.64	1.27
Ceramic pot	10	504	50.40	1.19
Metal pan	8	401	50.13	1.19
Mineral Water Jar	3	144	48.00	1.14
Paint Pot Tin/Plastic (Rong Kouta)	23	1070	46.52	1.10
Plastic pipe	80	3668	45.85	1.08
Manhole	39	1764	45.23	1.07
Polyethylene sheet	30	1289	42.97	1.02
Flower tub & tray	88	3756	42.68	1.01
Metal drum	16	639	39.94	0.94
Plastic Mug/pot/Bodna	132	5098	38.62	0.91
Clay pot	78	2973	38.12	0.90
Tree Hole	5	183	36.60	0.87
Bamboo Stamp	8	291	36.38	0.86
Discarded /or broken toilet parts	9	317	35.22	0.83
Plastic outgoing pipe	4	136	34.00	0.80

Small Plastic/ Tin Kouta	15	503	33.53	0.79
Vehicle parts (specify)	3	100	33.33	0.79
Flag stand hole	4	131	32.75	0.77
Gate Channel	35	1114	31.83	0.75
Other	62	1973	31.82	0.75
Refrigerator tray	5	153	30.60	0.72
Clay pitcher	3	90	30.00	0.71
Aluminium pot	3	67	22.33	0.53
Mineral Water Jar	3	63	21.00	0.50
Plastic bags	5	97	19.40	0.46
Coconut shell (dry or green)	5	88	17.60	0.42
Metal cooking sheet	2	19	9.50	0.22

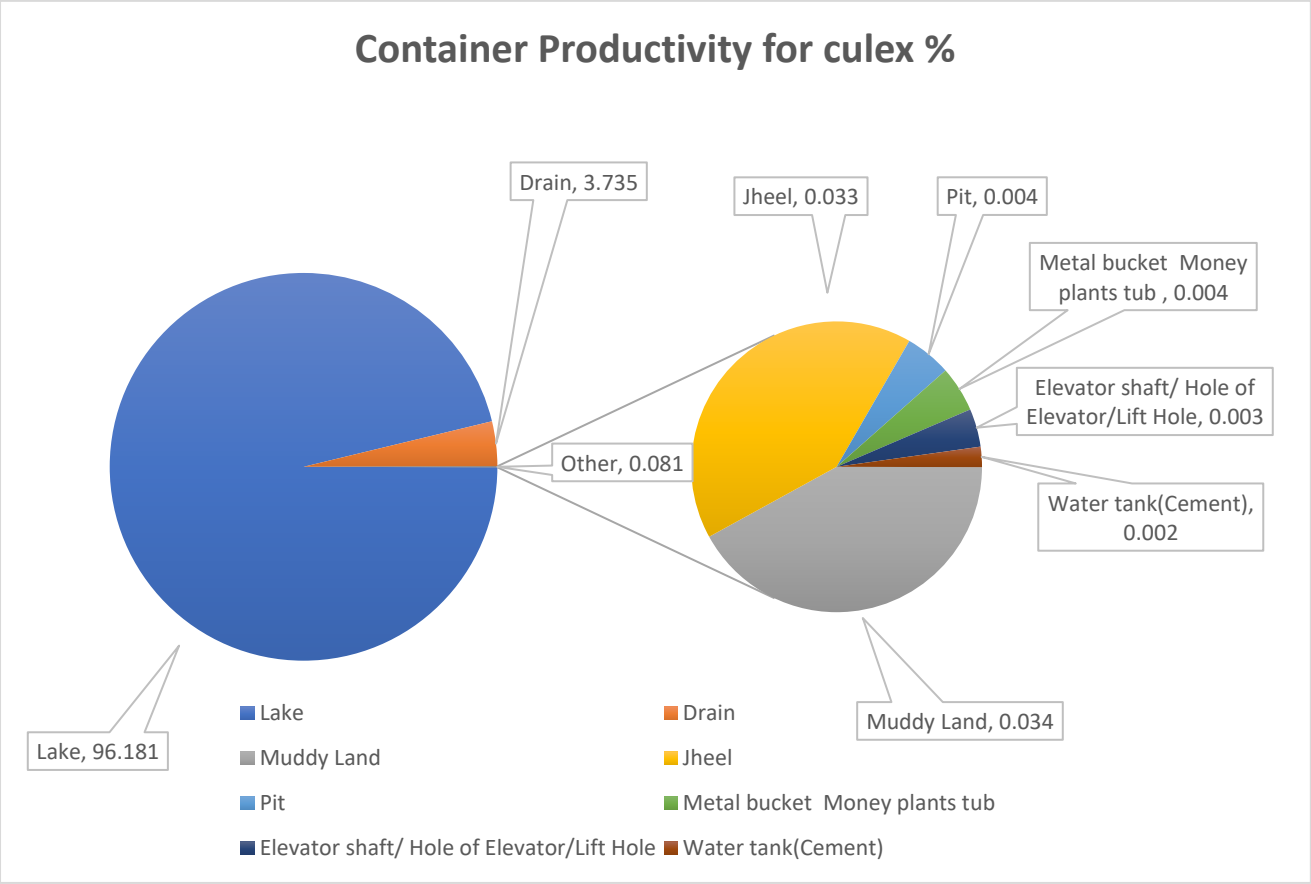


Fig. 13: Container Productivity of *Culex* mosquito in DNCC Week 1 to Week 111 (May 2, 2024 – July 21, 2026)

Table 7: Container Frequency & Probable potential Wet Container in zones (1-5) from Week 1 to Week 111 (May 2, 2024 – July 21, 2026)

Sources	+House	-WC	+WC	**Total WC**	% WC	% PWC
Plastic bucket	235	287	417	704	11.76	9.15
Basement/Parking	238	67	626	693	11.58	13.74
Water tank (Cement)	174	256	302	558	9.32	6.63
Plastic drum (Sealable)	257	83	468	551	9.21	10.27
Other	235	138	357	495	8.27	7.84
Plastic Mug/pot/Bodna	194	95	373	468	7.82	8.19
Hole of water meter	84	29	390	419	7.00	8.56
Flooded floor (basement or otherwise)	133	153	142	295	4.93	3.12
Flower tub & tray	99	32	234	266	4.44	5.14
Plastic bottle	91	64	171	235	3.93	3.75
Pit	74	23	131	154	2.57	2.88
Gate Channel	42	34	95	129	2.16	2.09
Manhole	61	43	81	124	2.07	1.78
Clay pot	91	11	102	113	1.89	2.24
Used Discarded Tires	37	19	51	70	1.17	1.12
Water tank (Plastic)	21	28	38	66	1.10	0.83
Polyethylene sheet	40	3	60	63	1.05	1.32
Metal bucket	27	6	48	54	0.90	1.05
Tin/metal can	31	0	53	53	0.89	1.16
Metal drum	20	8	43	51	0.85	0.94
Small Plastic/ Tin Kouta	24	9	40	49	0.82	0.88
Paint Pot Tin/Plastic (Rong Kouta)	30	5	43	48	0.80	0.94
Metal pan	17	3	43	46	0.77	0.94
Cemented Tank	22	13	29	42	0.70	0.64
Elevator shaft/ Hole of Elevator/Lift Hole	8	4	21	25	0.42	0.46
Mineral Water Jar	7	4	16	20	0.33	0.35
Plastic bags	8	2	17	19	0.32	0.37
Cement pot	11	3	15	18	0.30	0.33
Discarded /or broken toilet parts	12	3	14	17	0.28	0.31
Ceramic pot	13	0	15	15	0.25	0.33
Coconut shell (dry or green)	4	0	14	14	0.23	0.31
Bamboo Stamp	9	0	13	13	0.22	0.29
Refrigerator tray	9	0	12	12	0.20	0.26
Money plants tub	8	0	11	11	0.18	0.24
Flag stand hole	6	1	9	10	0.17	0.20
Dried guard shell	5	0	8	8	0.13	0.18
Metal cooking sheet	2	0	8	8	0.13	0.18
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
Clay pitcher	5	1	6	7	0.12	0.13
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	0.07
Discarded food wrapper or container	1	1	2	3	0.05	0.04
Battery shell (Discarded)	0	0	1	1	0.02	0.02

Table 8: Percentage of breeding sources in different zone from Week 1 to Week 111 (May 2, 2024 – July 21, 2026)

Containers	Percentage of Breeding Sources				
	Zone 01	Zone 02	Zone 03	Zone 04	Zone 05
Plastic bucket	2.07	2.12	2.16	2.97	2.44
Basement/Parking	2.96	1.70	3.02	1.19	2.71
Water tank (Cement)	1.22	1.55	1.20	2.67	2.67
Plastic drum (Sealable)	1.29	2.31	1.55	2.12	1.94
Other	2.69	1.45	2.27	0.69	1.17
Plastic Mug/pot/Bodna	1.45	1.30	1.84	2.16	1.39
Hole of water meter	0.82	1.24	0.43	2.19	2.32
Flooded floor (basement or otherwise)	1.22	1.19	0.77	0.58	1.17
Flower tub & tray	1.20	0.58	1.55	0.77	0.33
Plastic bottle	0.50	0.92	0.57	1.05	0.89
Pit	0.65	0.37	0.85	0.32	0.38
Gate Channel	0.85	0.20	0.58	0.07	0.45
Manhole	0.74	0.20	0.70	0.23	0.20
Clay pot	0.27	0.35	0.53	0.28	0.45
Used Discarded Tires	0.40	0.30	0.18	0.13	0.15
Water tank (Plastic)	0.00	0.69	0.15	0.13	0.13
Polyethylene sheet	0.28	0.27	0.22	0.20	0.08
Metal bucket	0.17	0.10	0.25	0.23	0.15
Tin/metal can	0.25	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	0.02	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	0.05	0.03	0.05	0.00	0.05
Flag stand hole	0.08	0.02	0.03	0.00	0.03
Dried guard shell	0.03	0.02	0.07	0.00	0.02
Metal cooking sheet	0.00	0.02	0.05	0.03	0.03
Unused Cork Sheet	0.00	0.02	0.03	0.03	0.05
Aluminium pot	0.02	0.03	0.00	0.05	0.02
Cement mixer	0.00	0.03	0.03	0.02	0.03
Clay pitcher	0.05	0.00	0.02	0.03	0.02
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	0.00

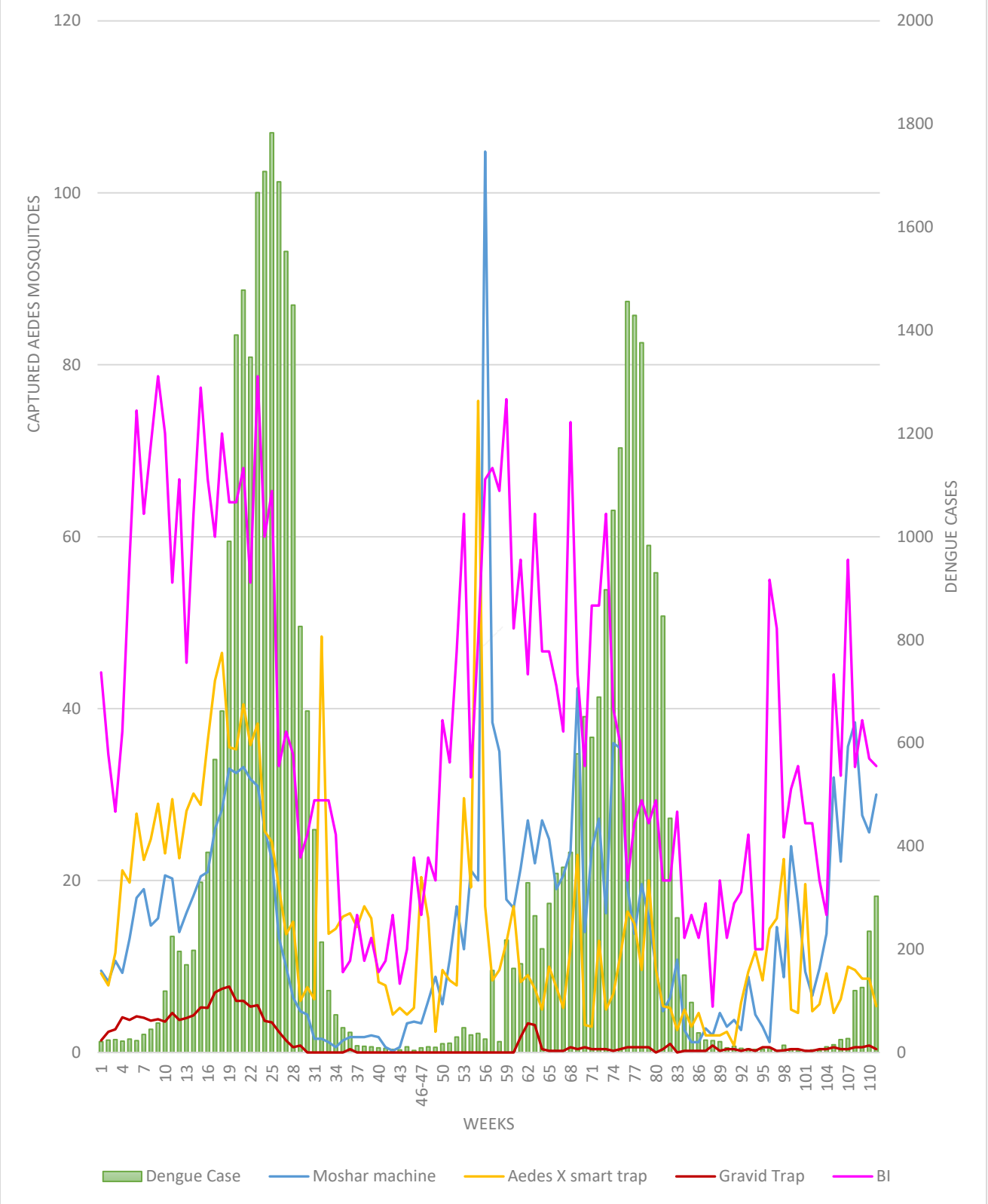


Fig. 14: Correlation between Dengue Cases and *Aedes* Mosquitoes Captured by per Moshar Machine CO_2 traps, Aedes X smart traps, and Gravid traps

NB: DNCC dengue cases only

Photographs of Mosquitoes Surveillance










Samples Collection from Field







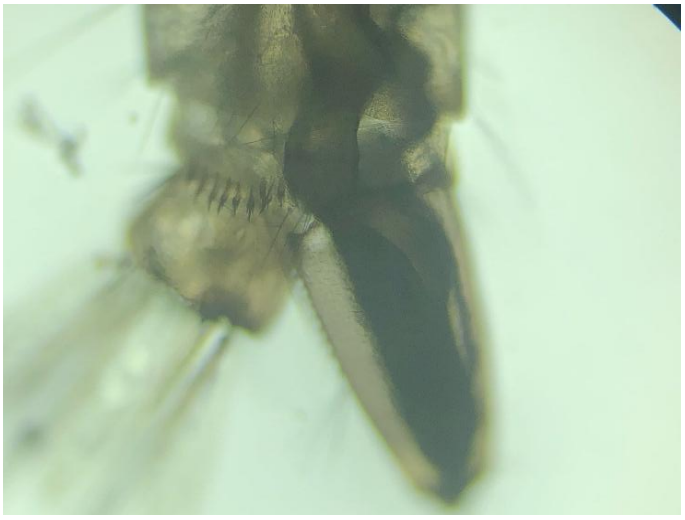


Samples Processing and Identification















Comments:
The mosquito density is decreased and the dengue cases increasing rapidly. The Breteau Index (BI) is decreased in week 111. 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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