Weekly Report on

JU-DNCC Mosquitoes Surveillance Program

Week 114 (Aug 07-11, 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.

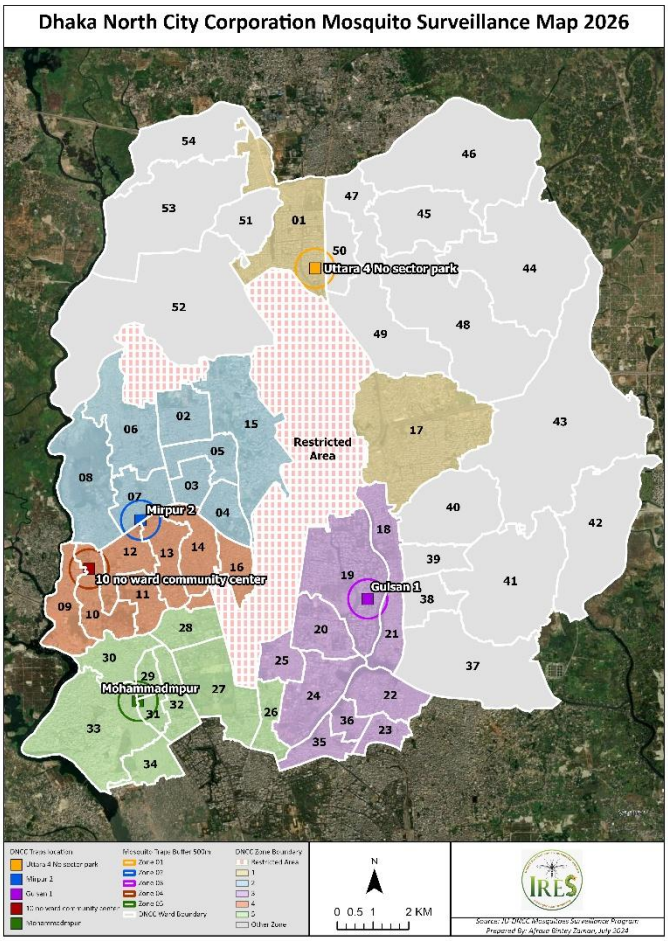
Zone	Traps Location	GPS Location
01	Uttara-4 No sector park	23.8613672,90.4035528
02	Mirpur-2, Vander office, DNCC	23.8036248,90.3601995
03	Gulsan 1, Purantan Vander office	23.7860557,90.4164024
04	10 No ward community center, Mirpur-1	23.7922967,90.3467992
05	Mohammadpur regional office of DNCC	23.7618721,90.3590884

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 114 (Aug 07-11, 2026)

Zone	*Ae. aegypti*	*Ae. albopictus*	*Cx. quinquefasciatus*	*Cx. tritaeniorhynchus*	*Ar. subalbatus*	*Mn. uniformis*	*An. subpictus*	Total	%
1	8	2	1485	462	18	1	1	1977	16.93
2	5	3	125	36	5	0	0	174	1.49
3	18	5	765	263	18	5	0	1074	9.20
4	38	7	3265	1625	164	0	0	5099	43.67
5	34	6	2627	659	24	2	0	3352	28.71
Total	103	23	8267	3045	229	8	1	11676	100.00
%	0.88	0.20	70.80	26.08	1.96	0.07	0.01	100.00	

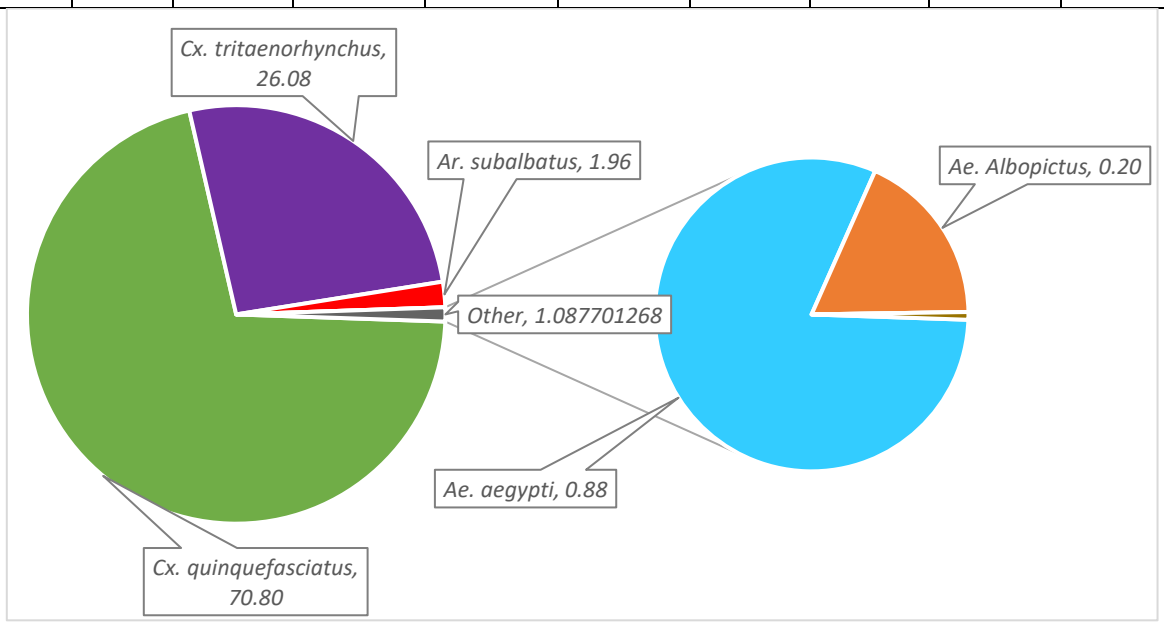


Fig. 1: Percentage of Adult Mosquitoes Collected by Moshar Machine (CO_2) traps in Week 114 (Aug 07-11, 2026)

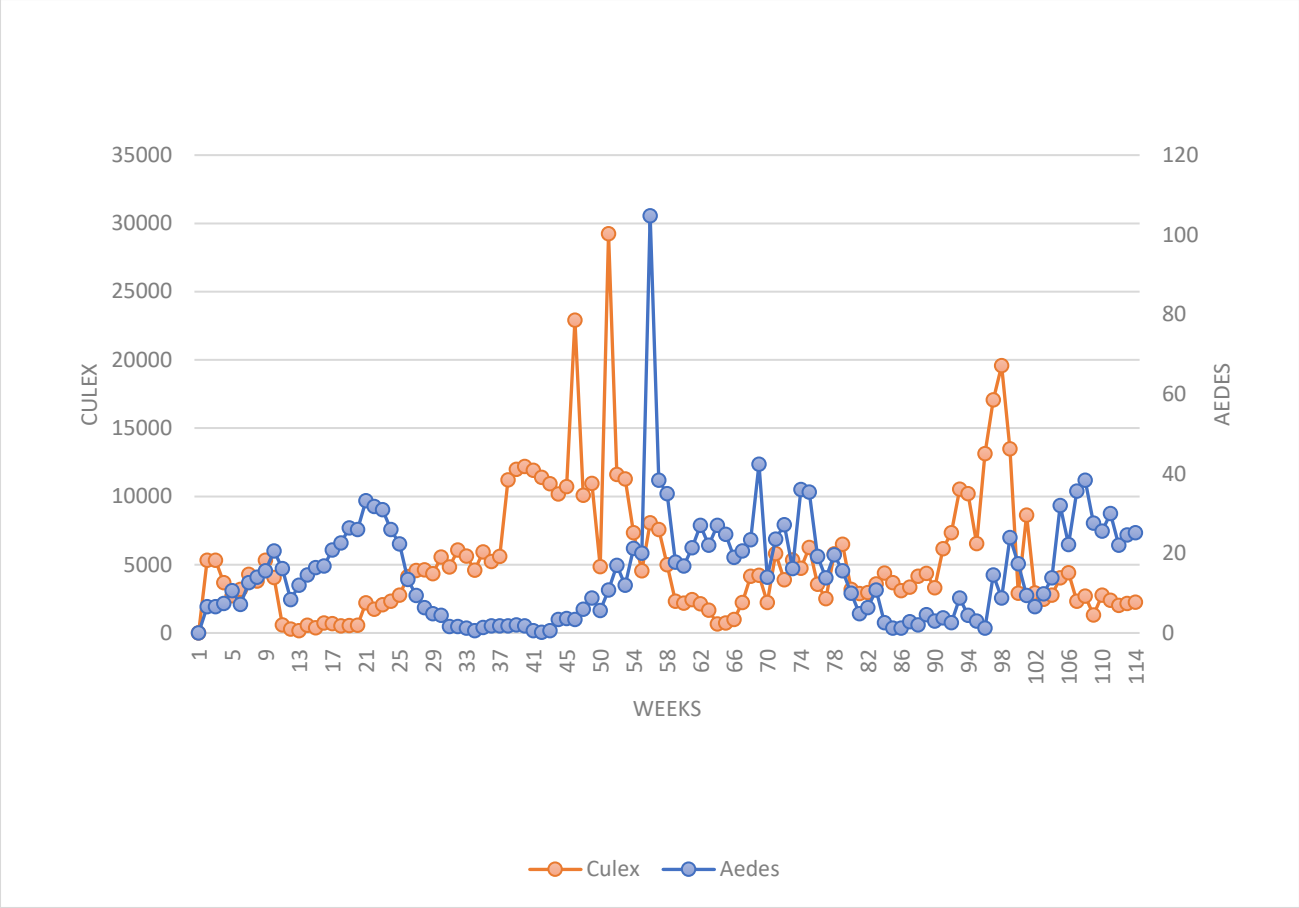


Fig 2: Average number of mosquitoes per Moshar Machine (CO_2) traps from Week 1 to Week 114 (May 2, 2024 – Aug 11, 2026)

Table 2. Collected Mosquito Larvae from *Aedes* X smart Traps in week 114 (Aug 07-11, 2026)

Zone	N	*Ae. aegypti*	*Ae. albopictus*
1	0	0	0
2	7	7	0
3	0	0	0
4	125	0	125
5	8	8	0
Total	140	15	125
(%)	100	10.71	89.29

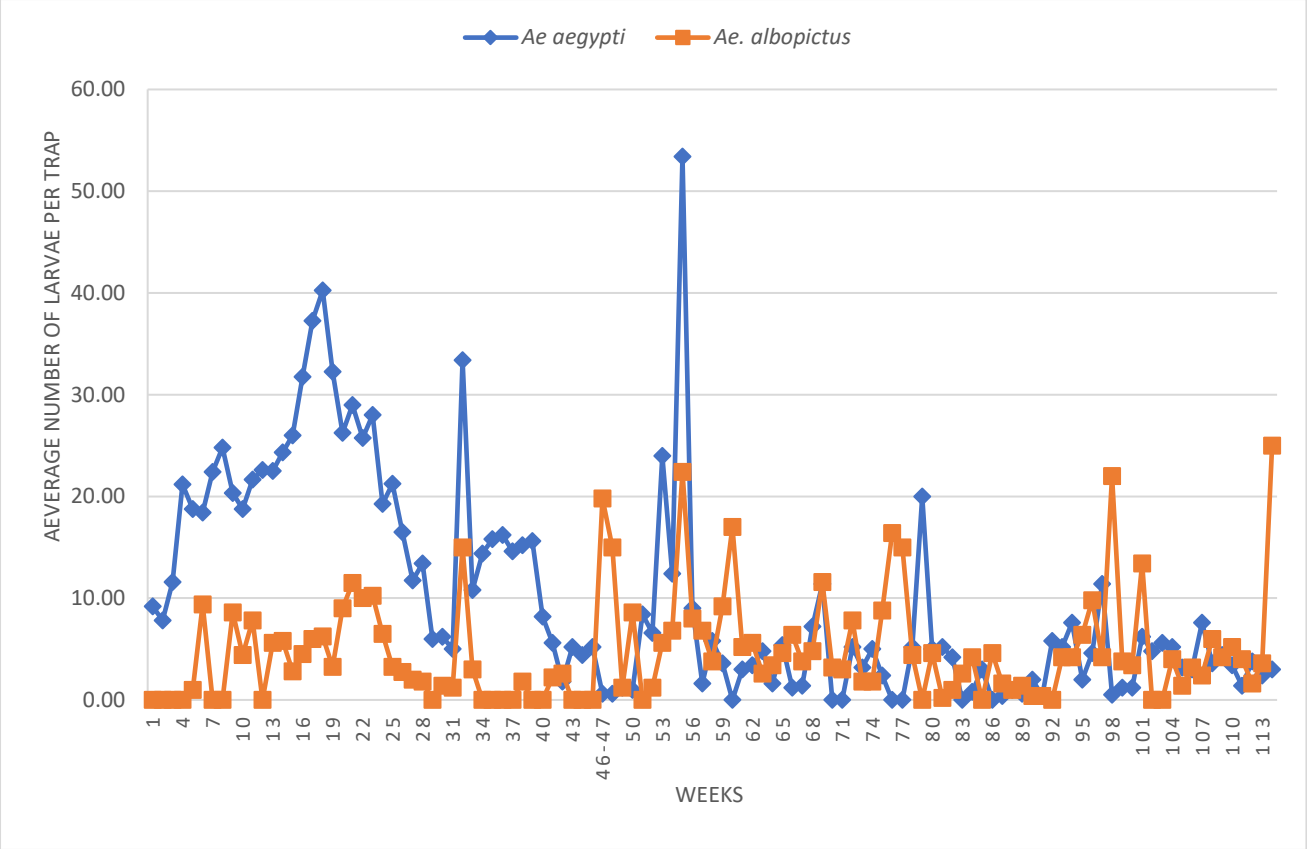


Fig 3: Average Number of *Aedes* Larvae per *Aedes* X Smart Trap in Zones 1-5 from Week 1 to Week 114 (May 2, 2024 – Aug 11, 2026)

Table 3. Collected Adult Mosquitoes from Gravid Trap in Week 114 (Aug 07-11, 2026)

Zone	Number of Mosquitoes	*Ae. aegypti*	*Ae. albopictus*	*Cx. quinquefasciatus*
1	2	1	0	1
2	2	0	1	1
3	2	0	0	2
4	3	0	2	1
5	1	1	0	0
Total	10	2	3	5
(%)	100.00	20	30	50

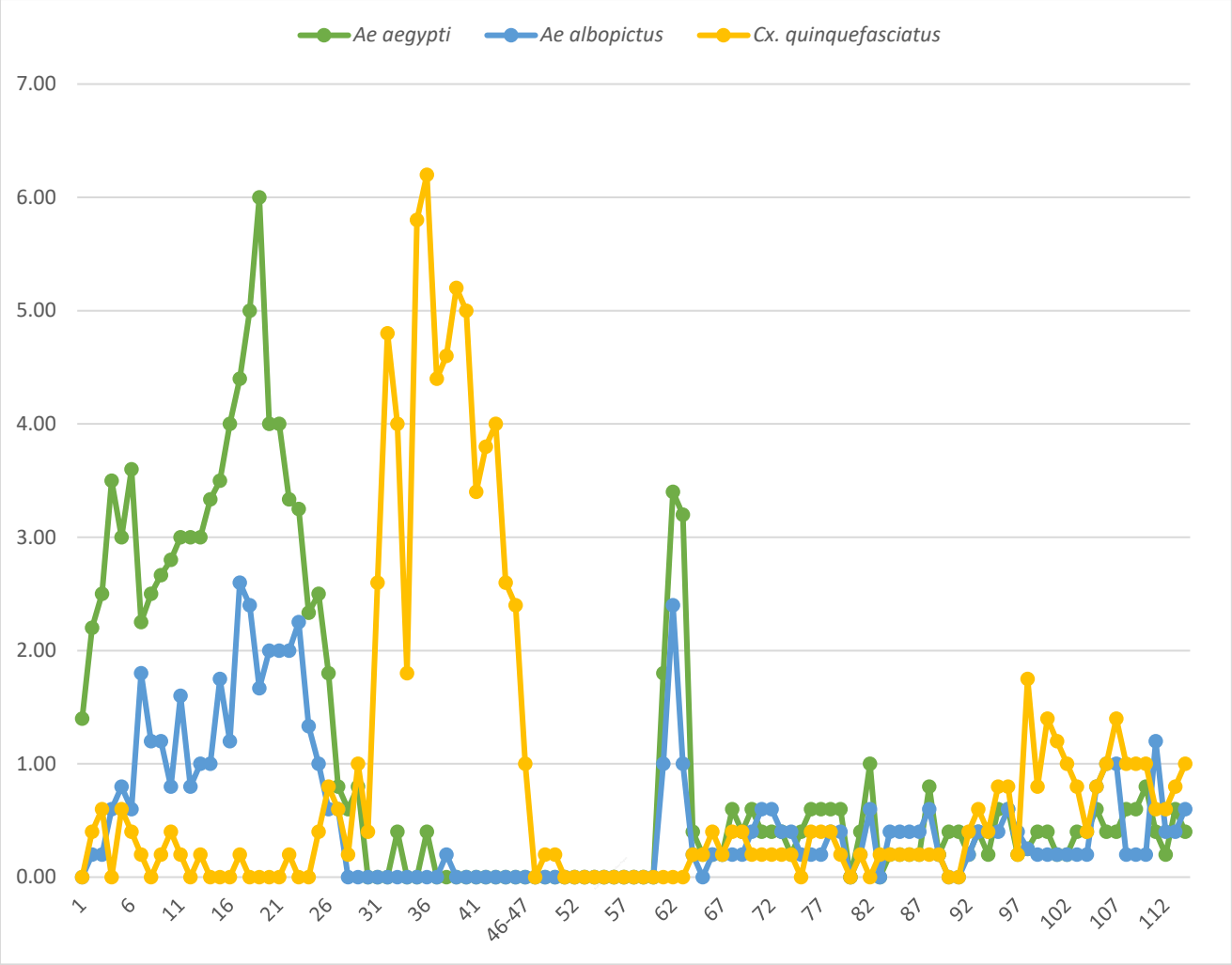


Fig 4: Average number of adult mosquitoes per Gravid trap in zones 1-5 from Week 1 to Week 114 (May 2, 2024 – Aug 11, 2026)

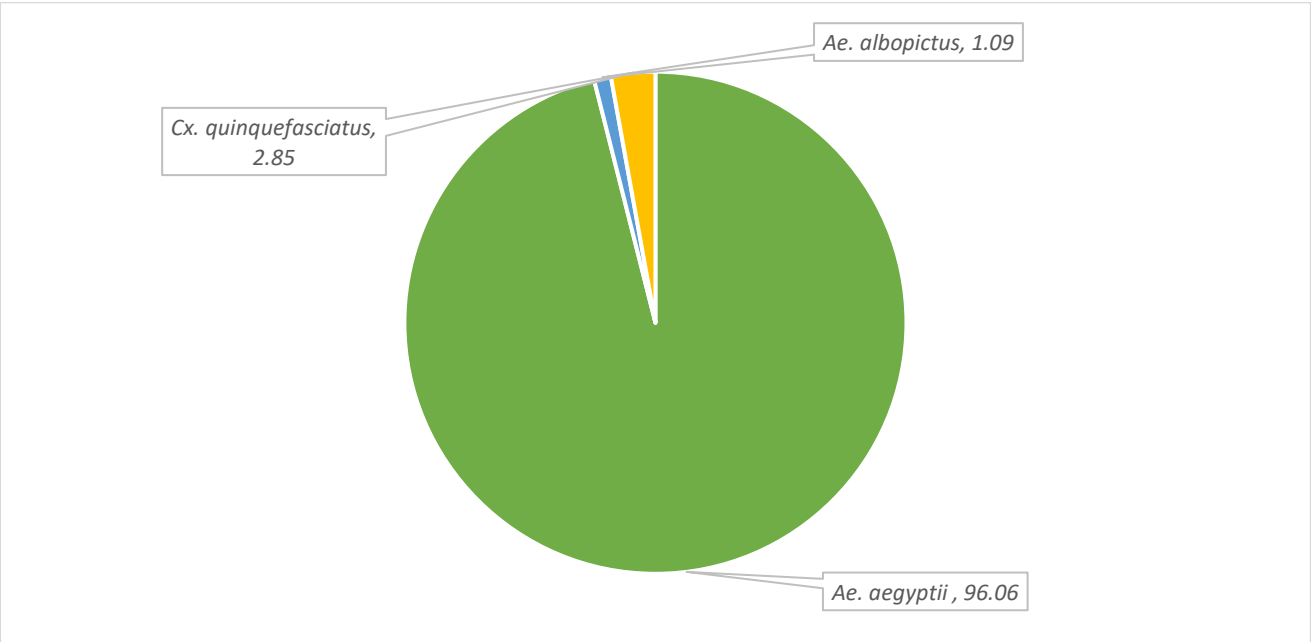
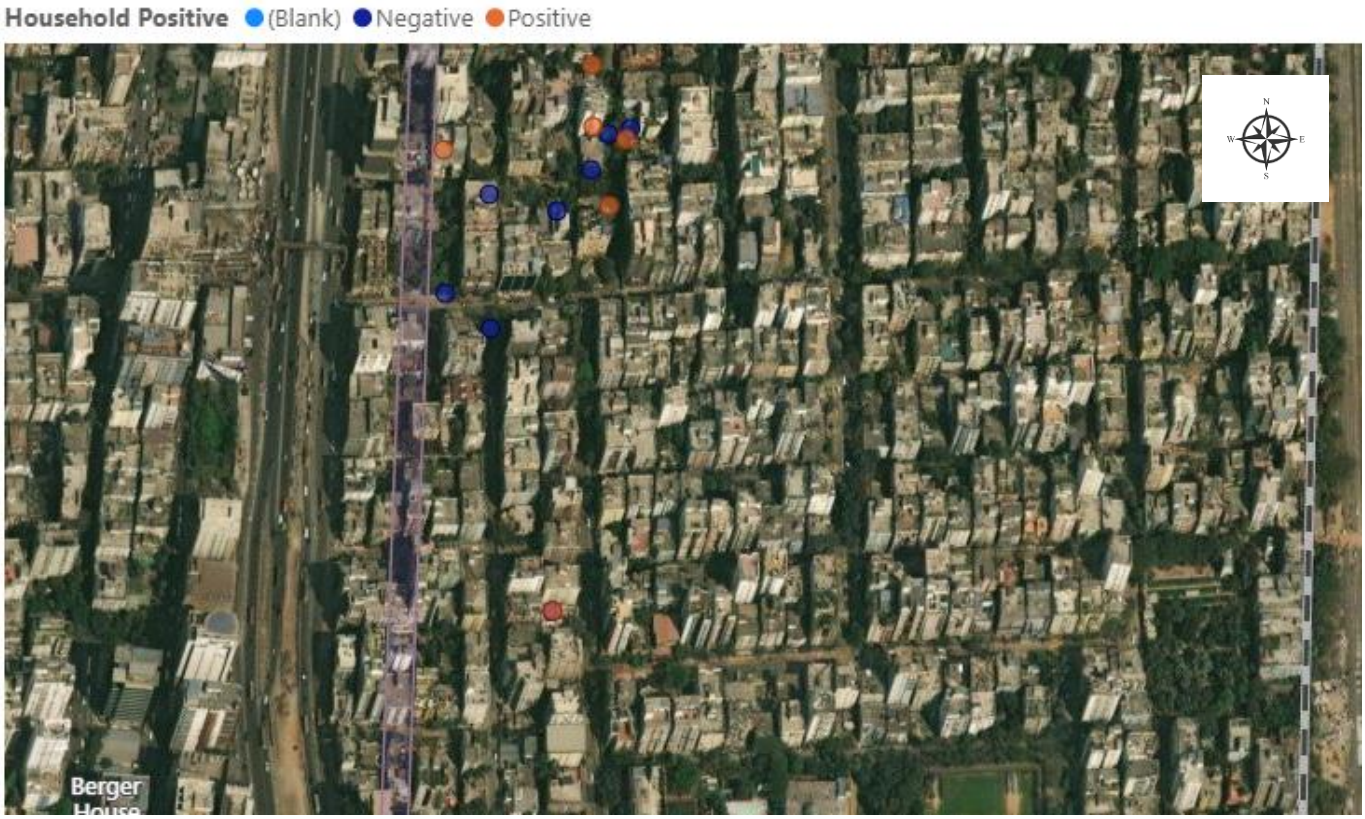


Fig. 5: Percentage of Mosquito Larvae from Zones (1-5) in week 114 (Aug 07-11, 2026)

Table 4. Positive Larval Spots in Different Zones (1-5) with Estimated Number of Larvae in week 114 (Aug 07-11, 2026)

Zone	GPS Location	*Ae. aegypti*	*Ae. albopictus*	*Cx. quinquefasciatus*	*Source*
1	23.8628017 90.4014733	0	0	21	Plastic Mug/pot/Bodna
	23.8652826 90.401895	13	0	0	Gate Channel
	23.8653494 90.4017054	0	8	0	Plastic drum (Sealable)
	23.8656751 90.4016984	19	0	0	Plastic drum (Sealable)
	Total	32	8	21	
2	23.803516 90.3538411	35	0	0	Flooded floor (basement or otherwise)
	Total	35	0	0	
3	23.7845841 90.4160845	23	0	0	Pit
	23.7845299 90.4150325	52	0	0	Plastic bucket
	23.7843516 90.4149836	87	0	0	Water tank (Plastic)
	23.7839659 90.4149495	23	0	0	Gate Channel
	23.783955 90.4146556	23	0	0	Metal bucket
	Total	208	0	0	
4	23.7877216 90.3459763	35	0	0	Plastic bucket
	23.7875933 90.34639	62	0	0	Plastic bucket
	23.7874785 90.3456482	23	0	0	Plastic Mug/pot/Bodna
	23.7874395 90.3460348	12	0	0	Other

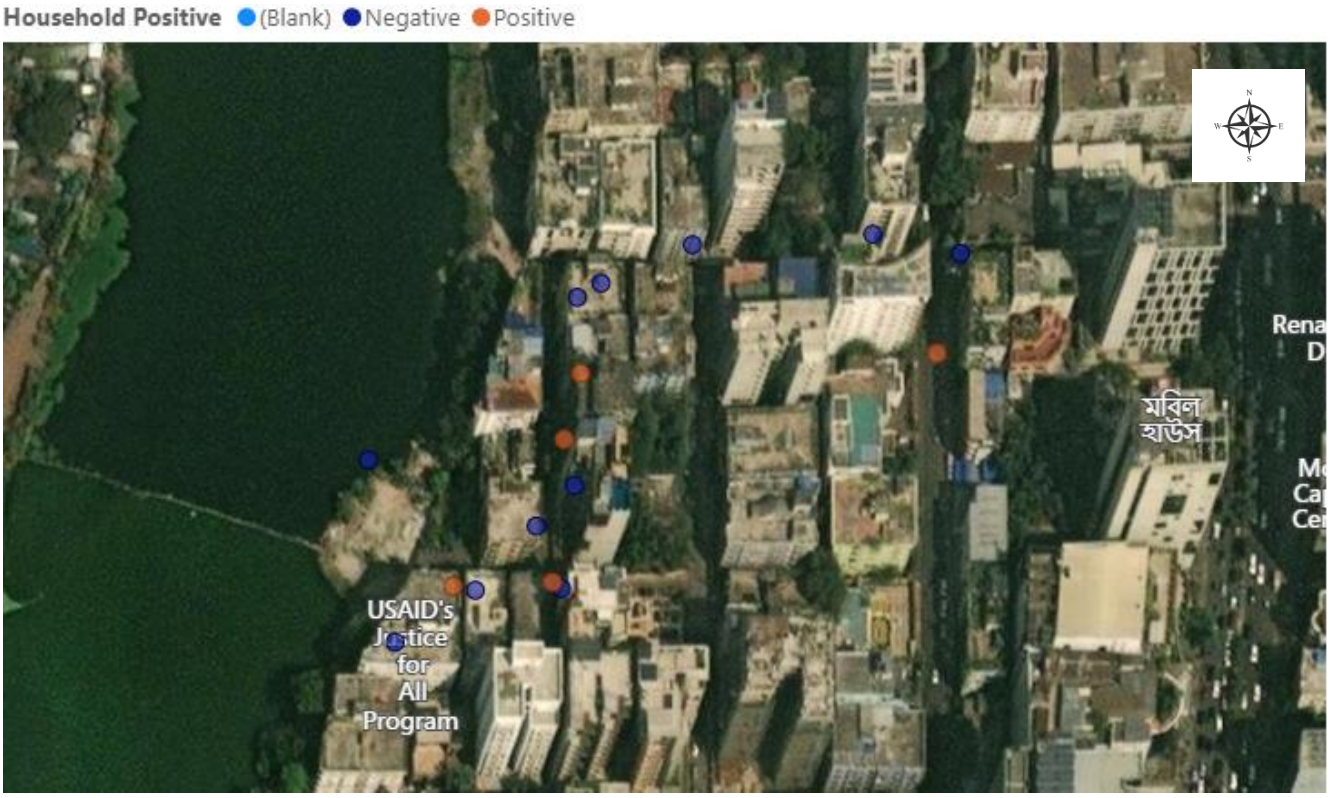
	23.7865837 90.3457004	52	0	0	Plastic drum (Sealable)
	23.7858355 90.3459815	68	0	0	Water tank (Cement)
	23.78586 90.3454073	86	0	0	Plastic bucket
	Total	338	0	0	
5	23.7600829 90.3576462	21	0	0	Plastic bottle
	23.7593364 90.3585076	52	0	0	Hole of water meter
	23.7587646 90.3585436	21	0	0	Hole of water meter
	Total	94	0	0	
Grand Total		707	8	21	



Map 1: Positive and Negative House of Uttara 4 No. Sector at Weeks 114



Map 2: Positive and Negative House of Mirpur 2 at Weeks 114



Map 3: Positive and Negative House of Gulshan 1 at Weeks 114



Map 4: Positive and Negative House of Mirpur 1 at Weeks 114



Map 5: Positive and Negative House of Mohammadpur at Weeks 114

Table 5: Positive House, Wet Container, BI, CI and HI in Zones (1-5) in week 114 (Aug 07-11, 2026)

Zone	Total House	Positive House	Total Wet container	Positive Wet Container	BI	CI	HI
1	15	4	47	6	40.00	12.77	26.67
2	15	1	27	1	6.67	3.70	6.67
3	15	5	36	8	53.33	22.22	33.33
4	15	7	46	11	73.33	23.91	46.67
5	15	3	37	4	26.67	10.81	20.00

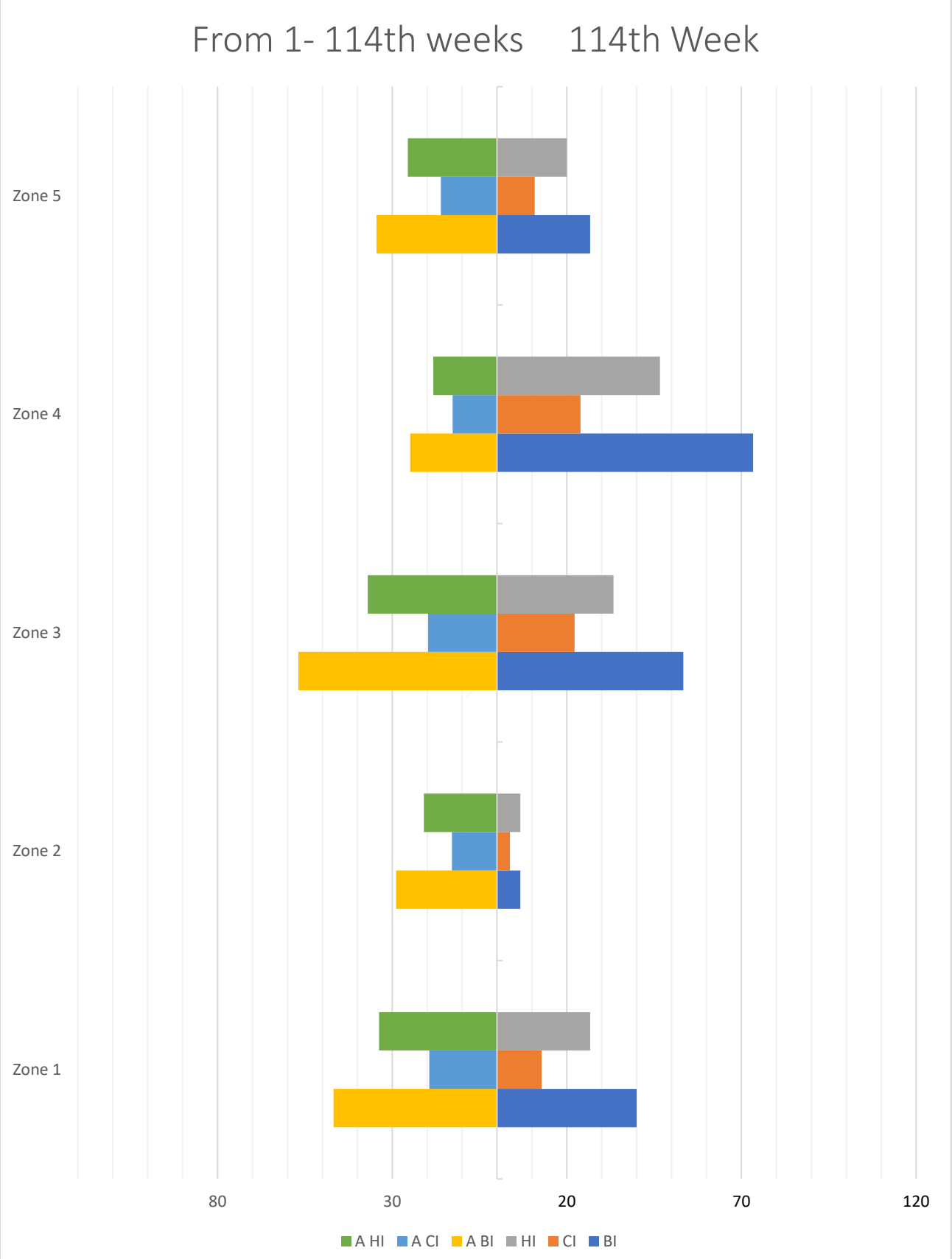


Fig. 6: BI, CI and HI in Different Zones (1-5) of Dhaka north City Corporation

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

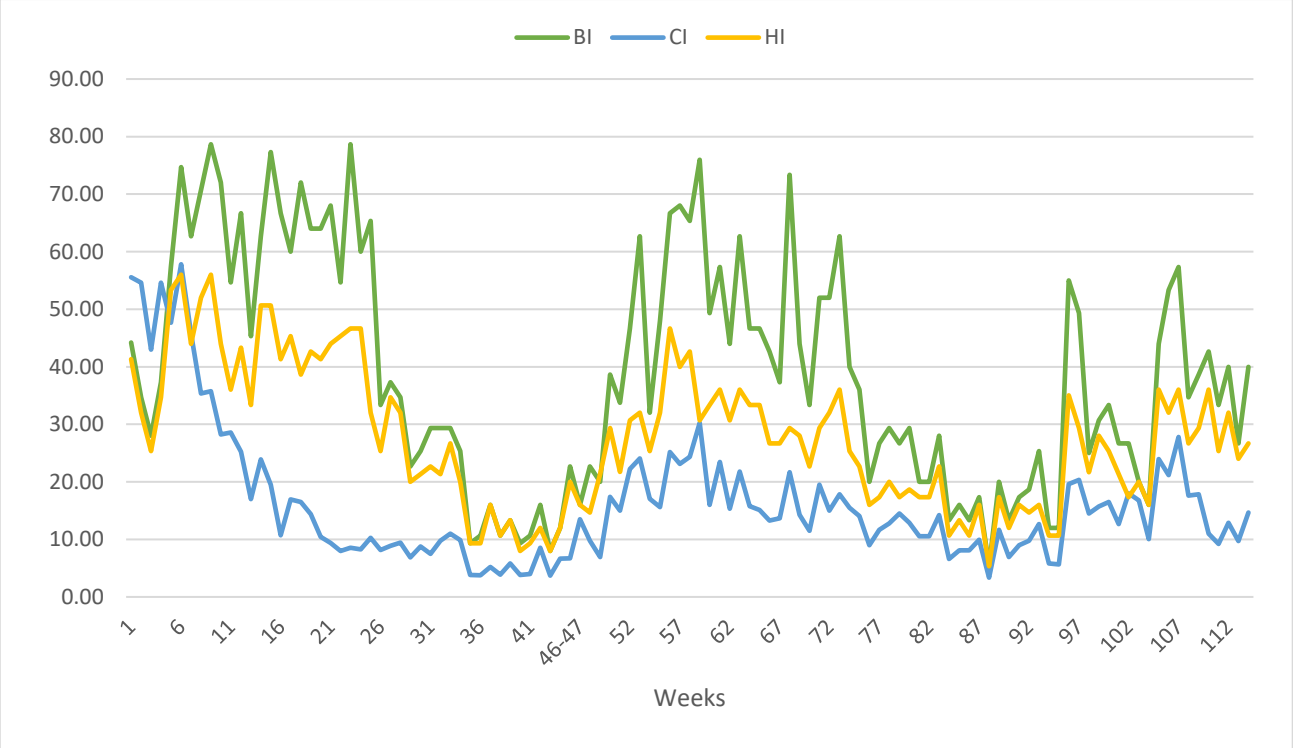


Fig 7: Mosquitoes population fluctuation (BI, CI, HI) from Week 1 to Week 114 (May 2, 2024 – Aug 11, 2026)

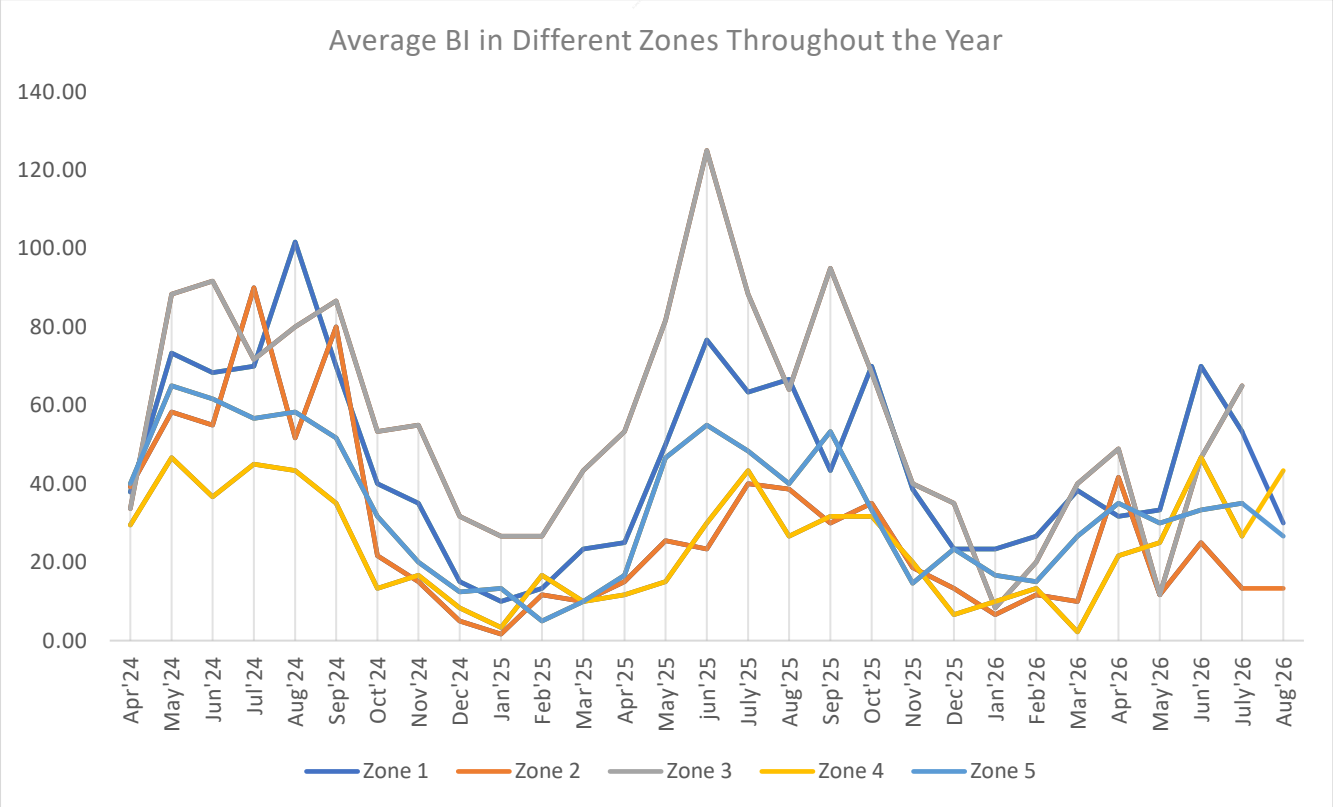


Fig. 8: Breteau Index (BI) in Different Zones from Week 1 to Week 114 (May 2, 2024 – Aug 11, 2026)

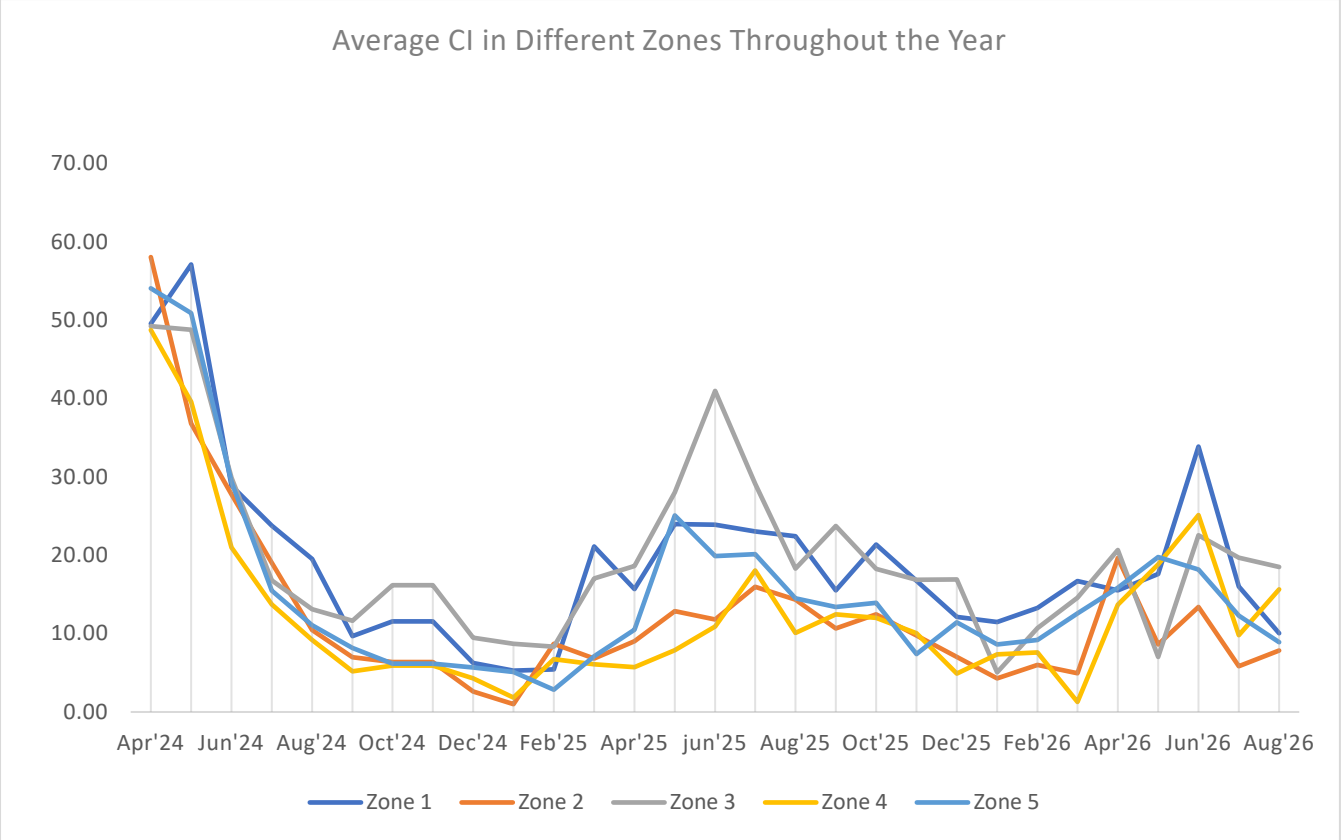


Fig. 9: Container Index (CI) in Different Zones from Week 1 to Week 114 (May 2, 2024 – Aug 11, 2026)

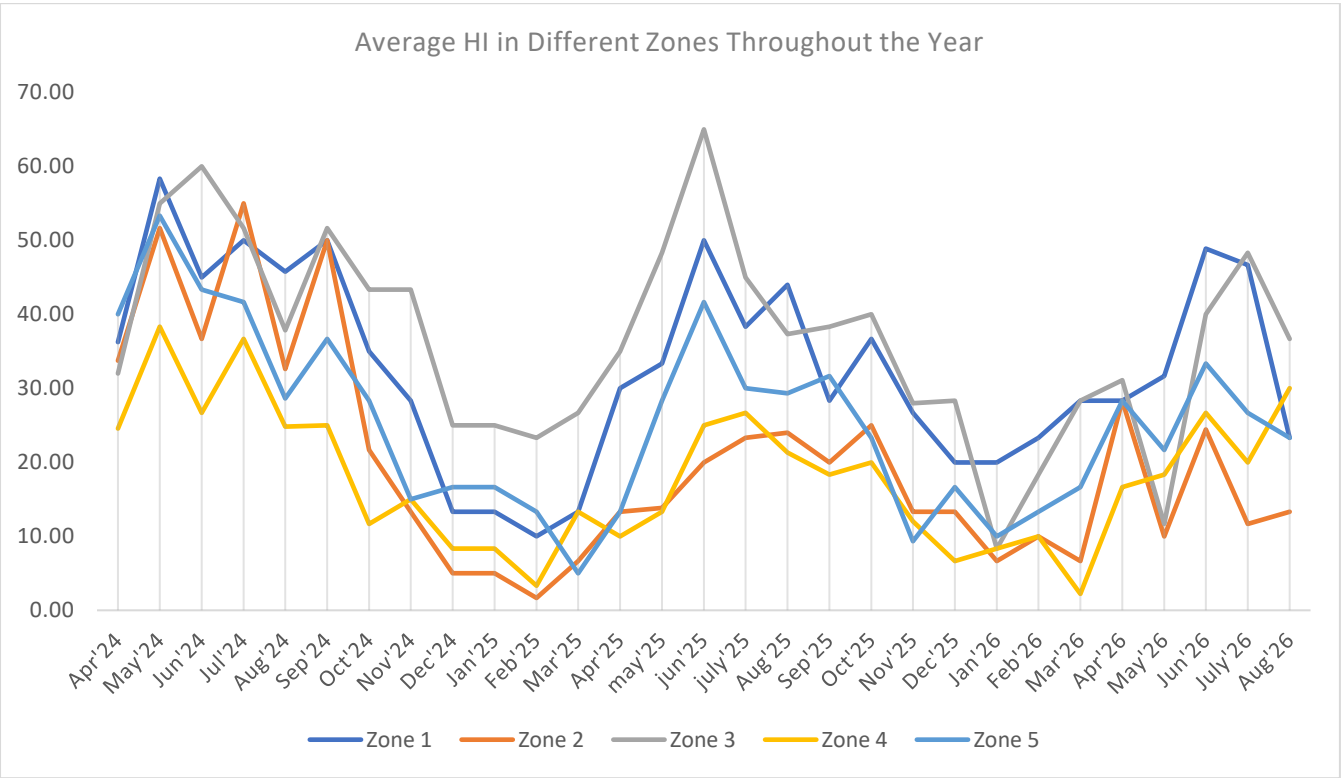


Fig. 10: House Index (HI) in Different Zones from Week 1 to Week 114 (May 2, 2024 – Aug 11, 2026)

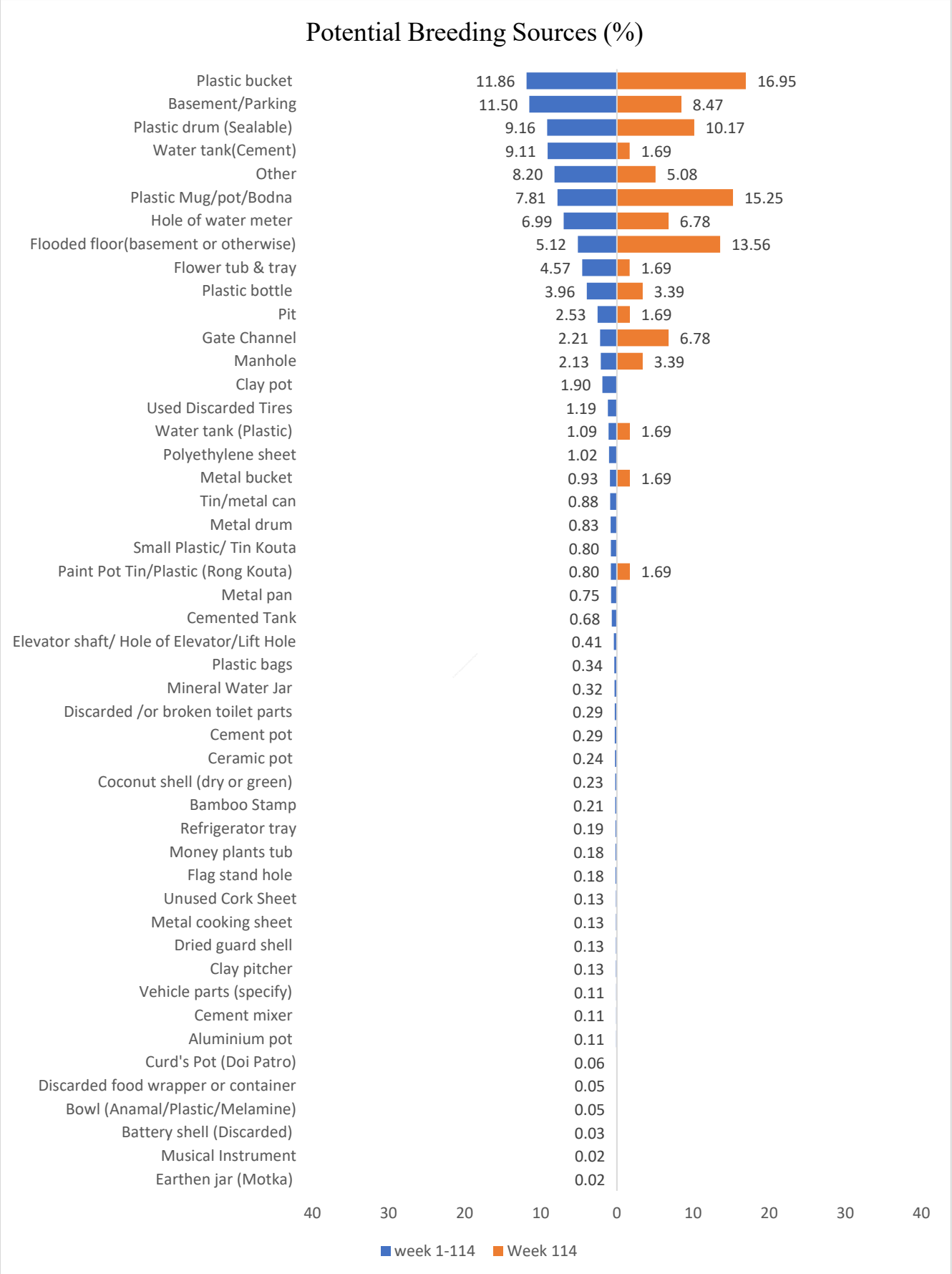


Fig. 11: Container Frequency for *Aedes* mosquitoes in Zones (1-5)

Table 6: Container Productivity of *Aedes* mosquito in DNCC from Week 1 to Week 114 (May 2, 2024 – Aug 11, 2026)

Container	Frequency	Total Estimated Aedes Larvae	Percentage of contribution (%)	Relative productivity index	CCPI
Plastic drum (Sealable)	204	41287	24.48	1.00	1.00
Water tank (Cement)	128	18712	11.09	0.45	0.52
Flooded floor (basement or otherwise)	119	16823	9.97	0.41	0.48
Basement/Parking	193	13849	8.21	0.34	0.58
Plastic bucket	191	12548	7.44	0.30	0.56
Plastic bottle	64	8624	5.11	0.21	0.25
Pit	44	6870	4.07	0.17	0.19
Hole of water meter	78	5983	3.55	0.14	0.24
Plastic Mug/pot/Bodna	136	5170	3.07	0.13	0.34
Flower tub & tray	94	4033	2.39	0.10	0.24
Plastic pipe	80	3668	2.17	0.09	0.21
Clay pot	79	2994	1.78	0.07	0.20
Used Discarded Tires	29	2724	1.62	0.07	0.10
Money plants tub	5	2675	1.59	0.06	0.05
Cemented Tank	15	2248	1.33	0.05	0.06
Other	65	2031	1.20	0.05	0.16
Water tank (Plastic)	18	1987	1.18	0.05	0.06
Manhole	40	1767	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	0.76	0.03	0.08
Tin/metal can	17	1468	0.87	0.04	0.05
Metal bucket	23	1203	0.71	0.03	0.06
Gate Channel	37	1150	0.68	0.03	0.09
Paint Pot Tin/Plastic (Rong Kouta)	23	1070	0.63	0.03	0.06
Cement pot	14	1067	0.63	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/Mel-amine)	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

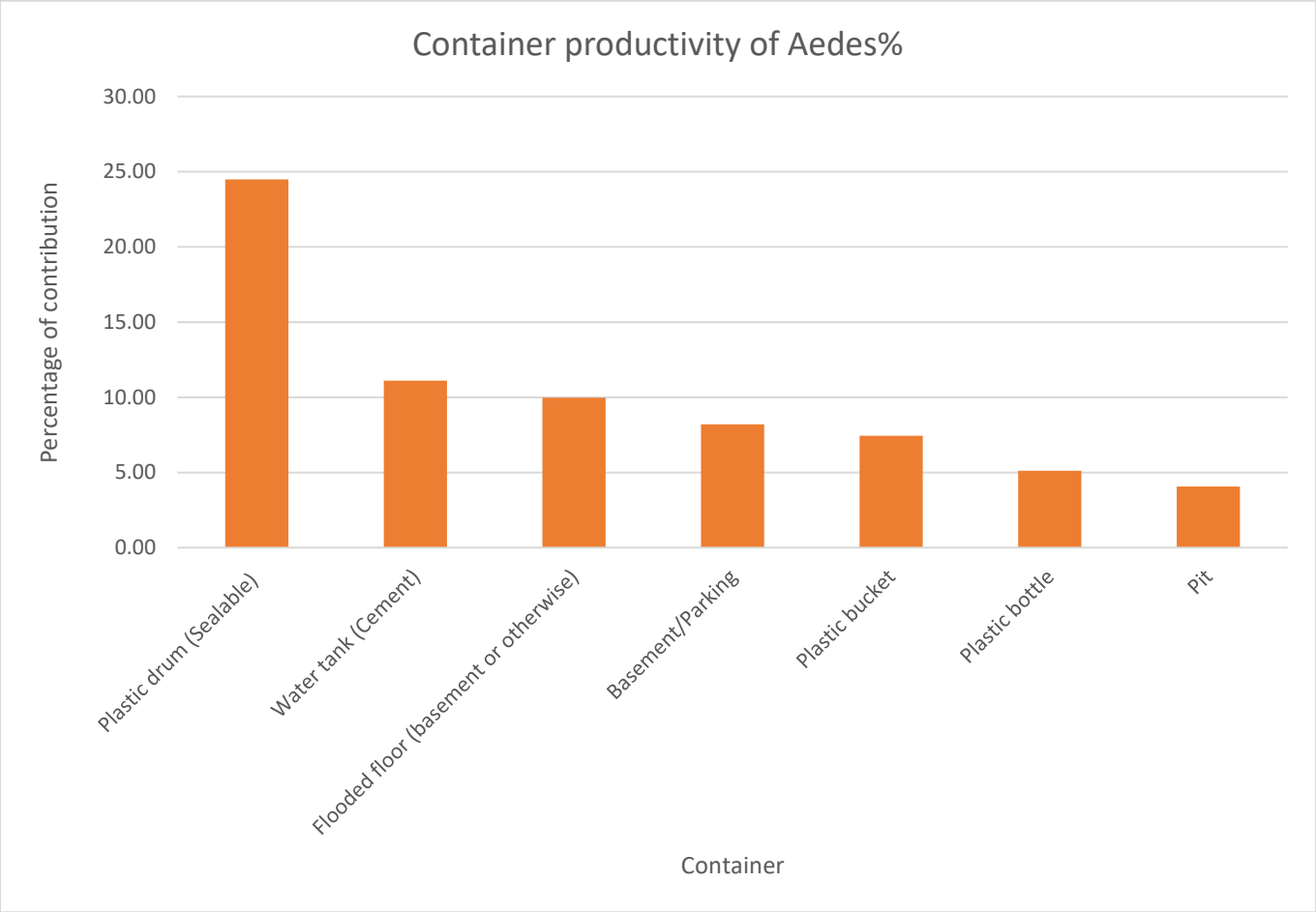


Fig 12: Major container types contributing to Aedes larval production in DNCC from Week 1 to Week 114 (May 2, 2024 – Aug 11, 2026)

Table 7: Container Productivity of *Aedes* mosquito in DNCC in Week 114 (Aug 07-11, 2026)

Container	Frequency	Total Aedes Larvae	Percentage of contribution (%)	Relative productivity index	CCPI
Plastic bucket	4	235	32.87	1.00	1.00
Flooded floor (basement or otherwise)	1	87	12.17	0.37	0.32
Plastic drum (Sealable)	3	79	11.05	0.34	0.50
Hole of water meter	2	73	10.21	0.31	0.39
Water tank (Cement)	1	68	9.51	0.29	0.27
Gate Channel	2	36	5.03	0.15	0.29
Water tank (plastic)	1	35	4.90	0.15	0.19
Pit	1	23	3.22	0.10	0.16
Metal bucket	1	23	3.22	0.10	0.16
Plastic Mug/pot/Bodna	1	23	3.22	0.10	0.16
Plastic bottle	1	21	2.94	0.09	0.15

Table 8: Comparison of the Five highest-CCPI Aedes breeding containers across the overall surveillance period (Weeks 1–114) and the current surveillance Week (Week 114)

Week 1-114	Week 114
 Plastic drum (CCPI=1.00)	 Plastic bucket (CCPI=1.00)
 Basement/Parking (CCPI=0.58)	 Plastic drum (CCPI=0.50)
 Plastic bucket (CCPI=0.56)	 Hole of water meter (CCPI=0.39)
 Water tank(cement) (CCPI=0.52)	 Flooded floor (CCPI=0.32)

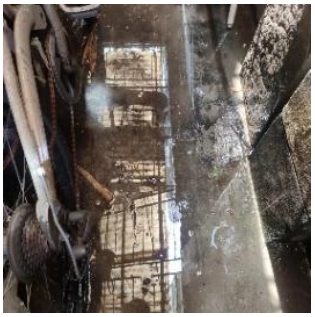
	
Flooded floor (CCPI=0.48)	Gate channel (CCPI=0.29)

Table 9: Container Frequency & Probable potential Wet Container in zones (1-5) from Week 1 to Week 114 (May 2, 2024 – Aug 11, 2026)

Sources	+House	-WC	+WC	**Total WC**	% WC	% PWC
Plastic bucket	249	287	443	730	11.86	7.20
Basement/Parking	244	67	641	708	11.50	10.41
Plastic drum (Sealable)	262	83	481	564	9.16	7.81
Water tank (Cement)	175	256	305	561	9.11	4.96
Other	239	138	367	505	8.20	5.96
Plastic Mug/pot/Bodna	201	95	386	481	7.81	6.27
Hole of water meter	86	31	399	430	6.99	6.48
Flooded floor (basement or otherwise)	138	153	162	315	5.12	2.63
Flower tub & tray	106	32	249	281	4.57	4.05
Plastic bottle	95	64	180	244	3.96	2.92
Pit	76	23	133	156	2.53	2.16
Gate Channel	44	34	102	136	2.21	1.66
Manhole	62	44	87	131	2.13	1.41
Clay pot	93	11	106	117	1.90	1.72
Used Discarded Tires	38	19	54	73	1.19	0.88
Water tank (Plastic)	22	28	39	67	1.09	0.63
Polyethylene sheet	40	3	60	63	1.02	0.97
Metal bucket	28	6	51	57	0.93	0.83
Tin/metal can	32	0	54	54	0.88	0.88
Metal drum	20	8	43	51	0.83	0.70
Paint Pot Tin/Plastic (Rong Kouta)	31	5	44	49	0.80	0.71
Small Plastic/ Tin Kouta	24	9	40	49	0.80	0.65
Metal pan	17	3	43	46	0.75	0.70
Cemented Tank	22	13	29	42	0.68	0.47
Elevator shaft/ Hole of Elevator/Lift Hole	8	4	21	25	0.41	0.34
Plastic bags	8	2	19	21	0.34	0.31
Mineral Water Jar	7	4	16	20	0.32	0.26
Cement pot	11	3	15	18	0.29	0.24
Discarded /or broken toilet parts	12	3	15	18	0.29	0.24
Ceramic pot	13	0	15	15	0.24	0.24
Coconut shell (dry or green)	4	0	14	14	0.23	0.23

Bamboo Stamp	9	0	13	13	0.21	0.21
Refrigerator tray	9	0	12	12	0.19	0.19
Flag stand hole	7	1	10	11	0.18	0.16
Money plants tub	8	0	11	11	0.18	0.18
Clay pitcher	6	1	7	8	0.13	0.11
Dried guard shell	5	0	8	8	0.13	0.13
Metal cooking sheet	2	0	8	8	0.13	0.13
Unused Cork Sheet	6	1	7	8	0.13	0.11
Aluminium pot	4	0	7	7	0.11	0.11
Cement mixer	2	0	7	7	0.11	0.11
Vehicle parts (specify)	5	1	6	7	0.11	0.10
Curd's Pot (Doi Patro)	3	0	4	4	0.06	0.06
Bowl (Anamal/Plastic/Melamine)	3	0	3	3	0.05	0.05
Discarded food wrapper or container	1	1	2	3	0.05	0.03
Battery shell (Discarded)	0	0	2	2	0.03	0.03

Table 10: Percentage of breeding sources in different zone from Week 1 to Week 114 (May 2, 2024 – Aug 11, 2026)

Containers	Percentage of Breeding Sources				
	Zone 01	Zone 02	Zone 03	Zone 04	Zone 05
Plastic bucket	2.08	2.11	2.16	3.04	2.47
Basement/Parking	2.92	1.67	3.04	1.17	2.70
Water tank (Cement)	1.30	2.27	1.51	2.13	1.95
Plastic drum (Sealable)	1.19	1.53	1.17	2.63	2.60
Other	2.63	1.46	2.24	0.70	1.17
Plastic Mug/pot/Bodna	1.46	1.28	1.51	2.14	1.41
Hole of water meter	0.80	1.27	0.44	2.16	2.32
Flooded floor (basement or otherwise)	1.23	1.23	0.81	0.63	1.20
Flower tub & tray	1.25	0.62	1.59	0.76	0.34
Plastic bottle	0.54	0.93	0.57	1.06	0.88
Pit	0.63	0.36	0.86	0.31	0.37
Gate Channel	0.88	0.19	0.60	0.06	0.47
Manhole	0.73	0.23	0.71	0.23	0.23
Clay pot	0.29	0.34	0.54	0.28	0.45
Used Discarded Tires	0.39	0.34	0.18	0.13	0.15
Water tank (Plastic)	0.00	0.67	0.16	0.13	0.13
Polyethylene sheet	0.28	0.26	0.21	0.19	0.08
Metal bucket	0.16	0.10	0.26	0.24	0.16
Tin/metal can	0.26	0.23	0.18	0.16	0.05
Metal drum	0.16	0.13	0.18	0.24	0.11
Small Plastic/ Tin Kouta	0.19	0.08	0.23	0.18	0.11
Paint Pot Tin/Plastic (Rong Kouta)	0.21	0.15	0.23	0.10	0.11
Metal pan	0.15	0.16	0.23	0.08	0.13
Cemented Tank	0.13	0.10	0.16	0.19	0.10
Elevator shaft/ Hole of Elevator/Lift Hole	0.18	0.10	0.06	0.00	0.06
Mineral Water Jar	0.03	0.02	0.06	0.15	0.08

Plastic bags	0.05	0.02	0.05	0.15	0.06
Cement pot	0.05	0.02	0.10	0.02	0.11
Discarded /or broken toilet parts	0.03	0.13	0.03	0.00	0.10
Ceramic pot	0.06	0.02	0.05	0.02	0.10
Coconut shell (dry or green)	0.05	0.06	0.05	0.03	0.03
Bamboo Stamp	0.05	0.08	0.03	0.05	0.00
Refrigerator tray	0.06	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	0.06	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

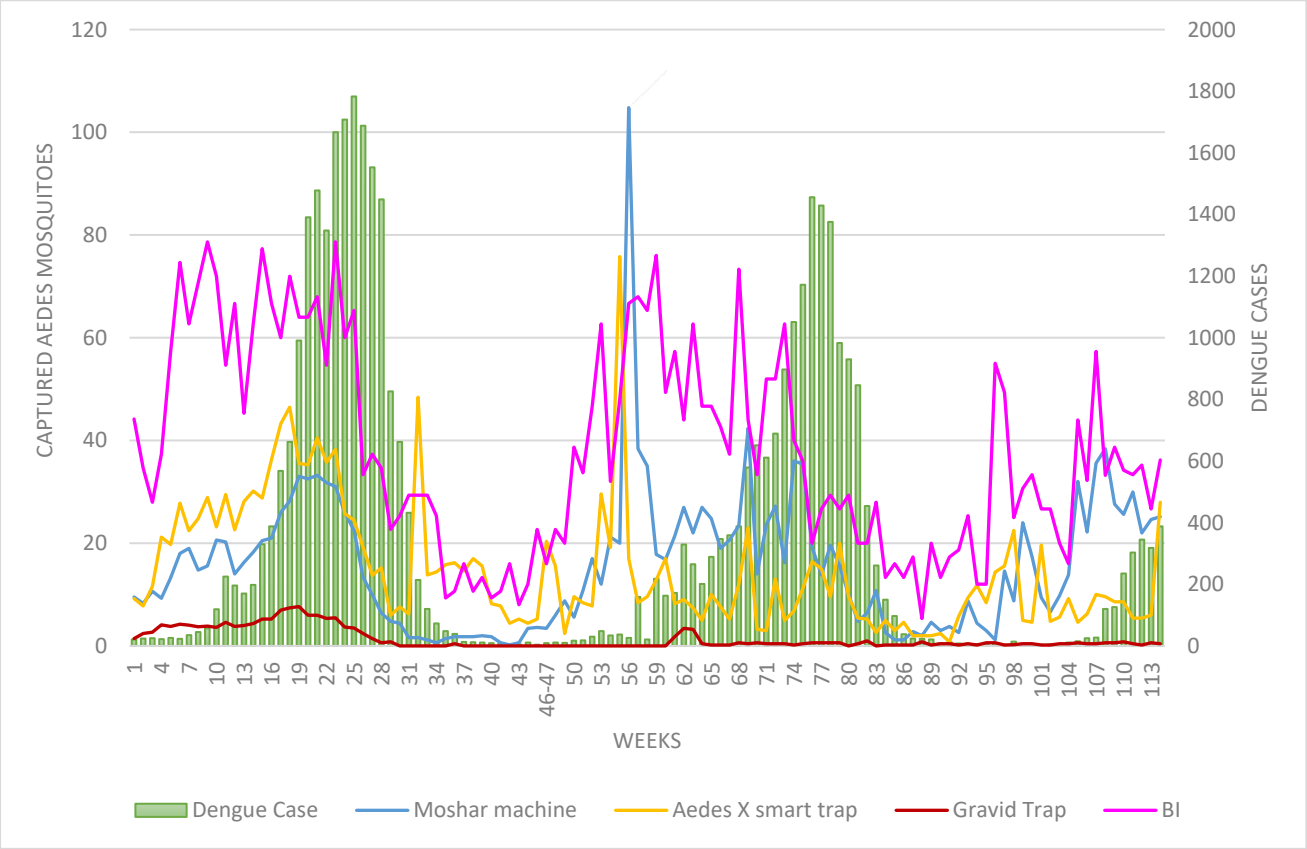


Fig. 13: Correlation between Dengue Cases and *Aedes* Mosquitoes Captured by per Moshar Machine CO_2 traps, Aedes X smart traps, and Gravid traps

NB: DNCC dengue cases only

Photographs of Mosquitoes Surveillance





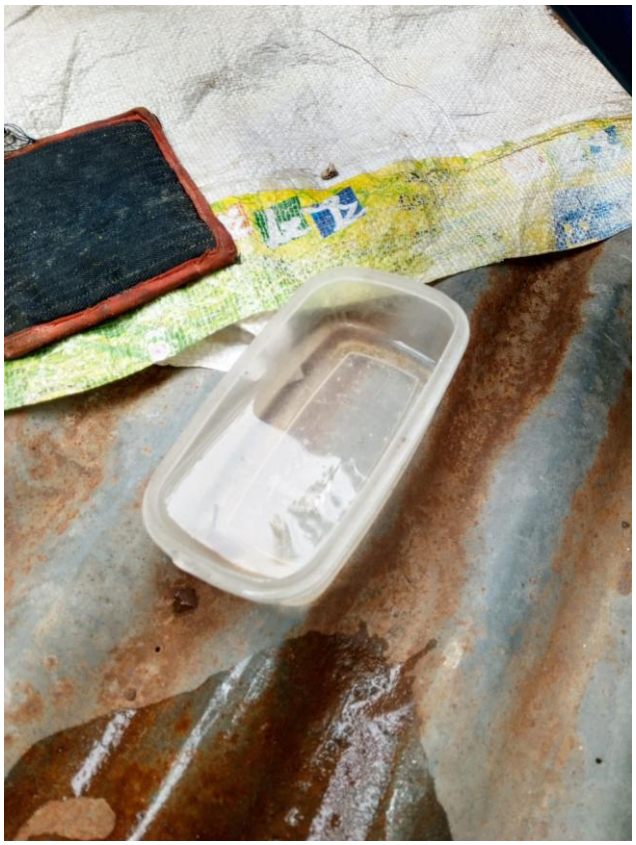





Samples Collection from Field





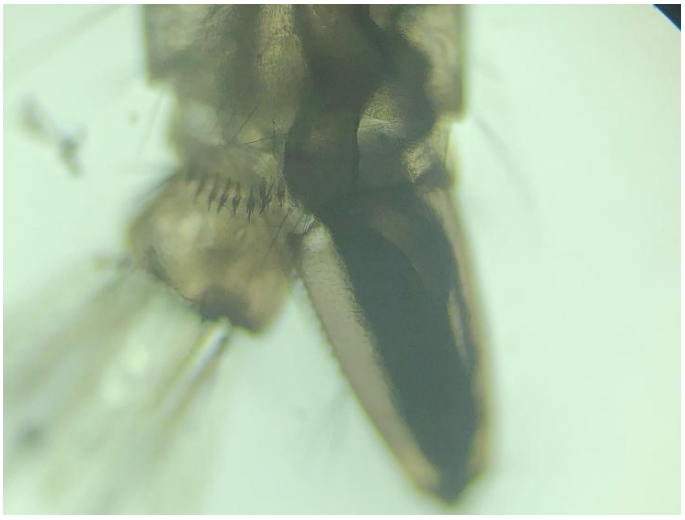



Samples Processing and Identification















Comments:
The mosquito density is increased and the dengue cases increasing rapidly. The Breteau Index (BI) is increased in week 114. 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
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