Weekly Report on

JU-DNCC Mosquitoes Surveillance Program

Week 125 (October 23-27, 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

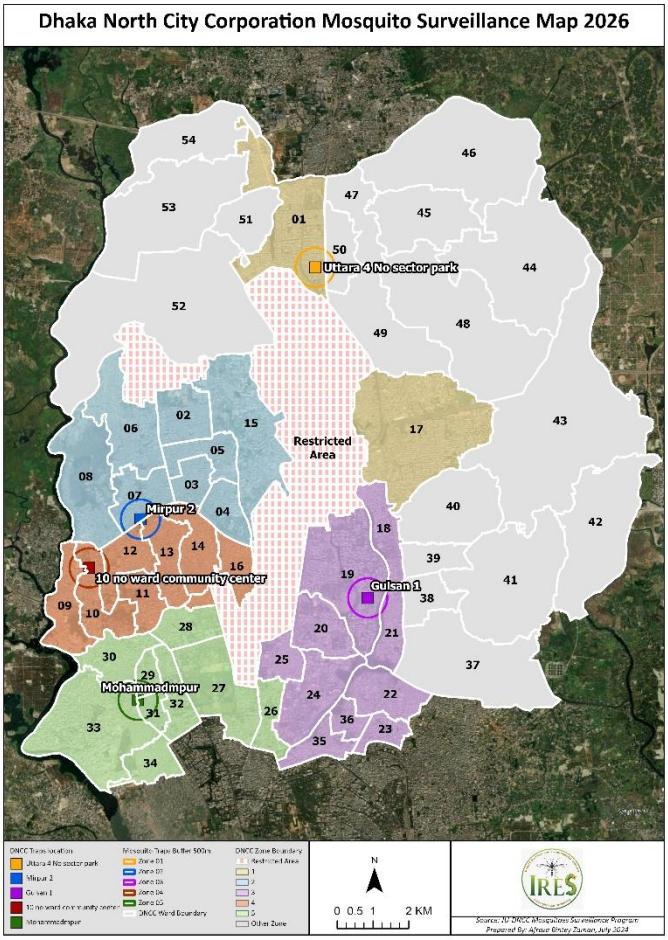
1. Light trap

For the mosquito larvae collection

1. Aedes X smart trap
2. Directly collection larvae from field.

For the *Aedes* mosquito larvae and egg collection

1. Den-X-Trap
   i. Only water (control)
   ii. Lure
   iii. Lure2Kill



Results:

Table 1. Collected Adult Mosquitoes from Moshar Machine (CO_2) traps in Week 125 (Oct 23-27, 2026)

Zone	*Ae. aegypti*	*Ae. albopictus*	*Cx. quinquefasciatus*	*Cx. tritaeniorhynchus*	*Cx. gelidus*	*Ar. subalbatus*	*Mn. uniformis*	*An. vagus*	*An. subpictus*	*An. annularis*	*Total*	%
1	18	4	2465	778	126	123	4	0	3	0	3521	15.75
2	7	2	375	68	0	14	0	0	0	0	466	2.08
3	26	5	3258	656	0	72	0	2	0	0	4019	17.97
4	29	12	4642	1106	0	68	2	7	0	11	5877	26.28
5	19	5	6757	1672	0	19	2	0	0	2	8476	37.91
Total	99	28	17497	4280	126	296	8	9	3	13	22359	100.00
%	0.44	0.13	78.25	19.14	0.56	1.32	0.04	0.04	0.01	0.06	100.00	

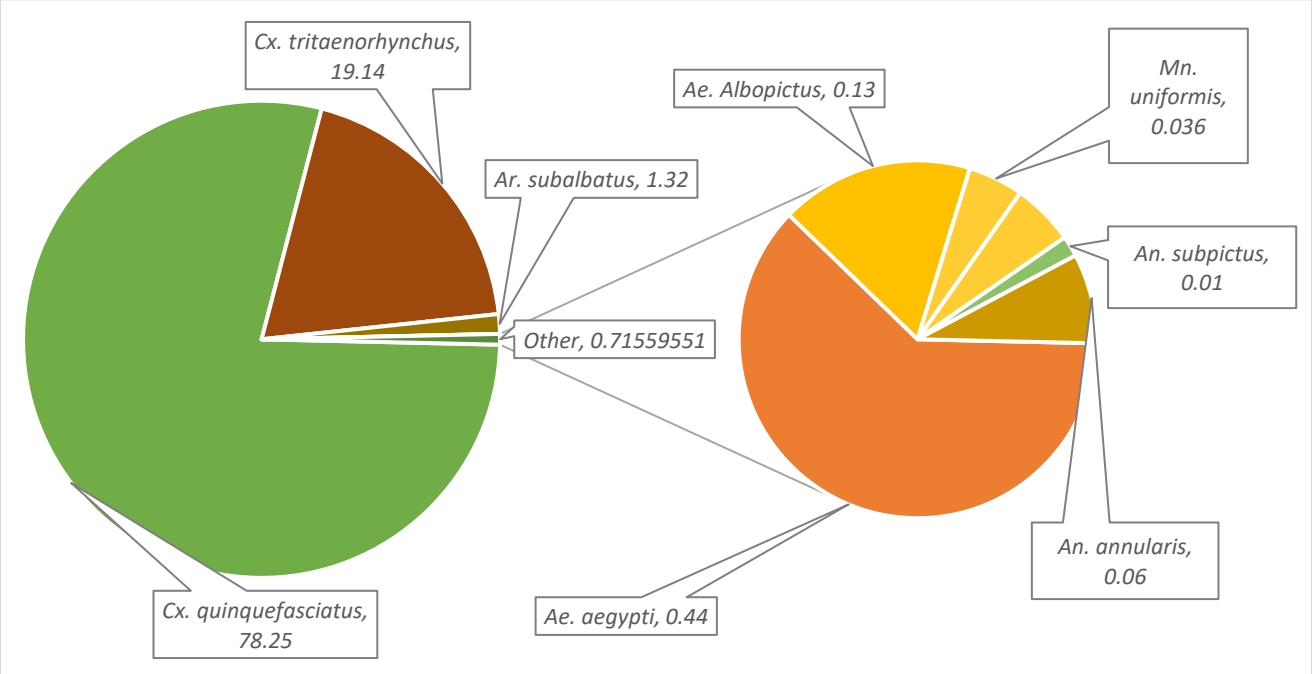


Fig. 1: Percentage of Adult Mosquitoes Collected by Moshar Machine (CO_2) traps in Week 125 (Oct 23-27, 2026)

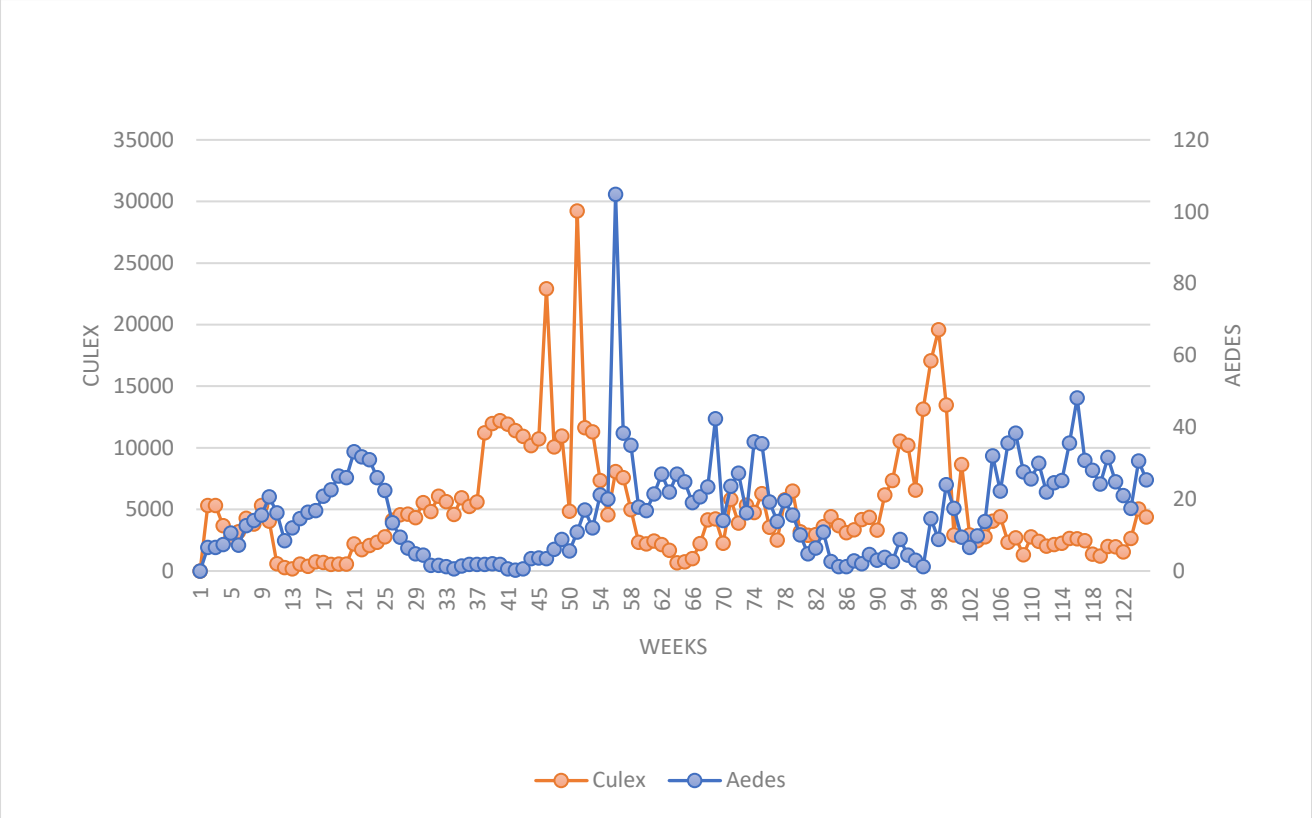


Fig 2: Average number of mosquitoes per Moshar Machine (CO_2) traps from Week 1 to Week 125 (May 2, 2024 – Oct 27, 2026)

Table 2. Collected Mosquito Larvae from *Aedes* X smart Traps in Week 125 (Oct 23-27, 2026)

Zone	N	*Ae. aegypti*	*Ae. albopictus*
1	7	7	0
2	0	0	0
3	12	0	12
4	0	0	0
5	0	0	0
Total	19	7	12
(%)	100	36.84	63.16





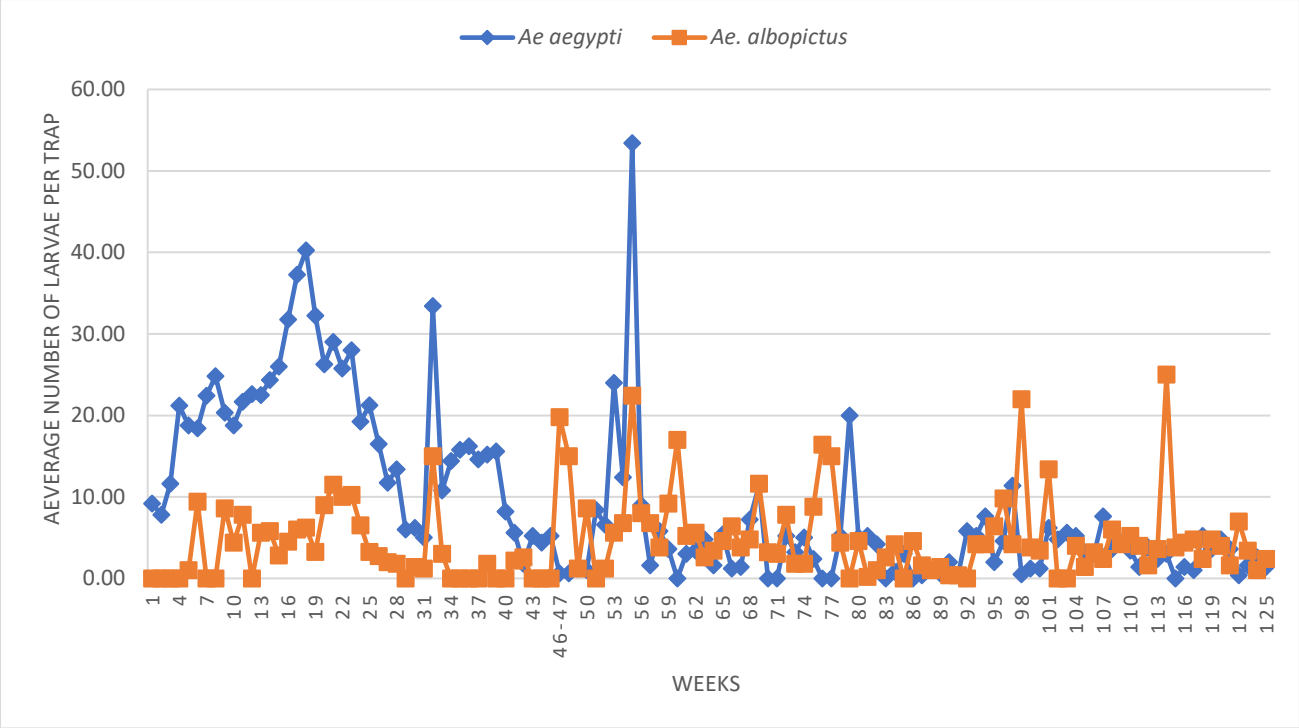


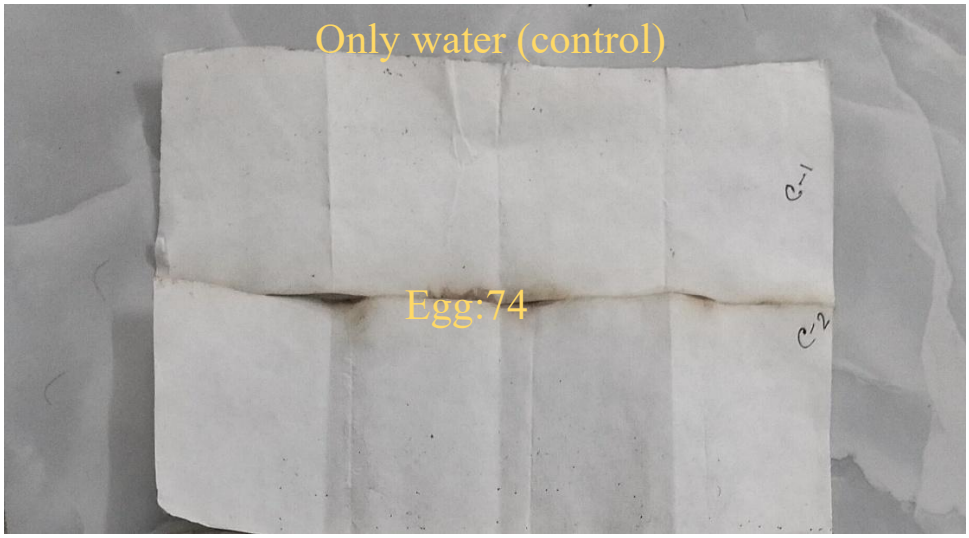
Fig 3: Average Number of *Aedes* Larvae per *Aedes* X Smart Trap in Zones 1-5 from Week 1 to Week 125 (May 2, 2024 – Oct 27, 2026)

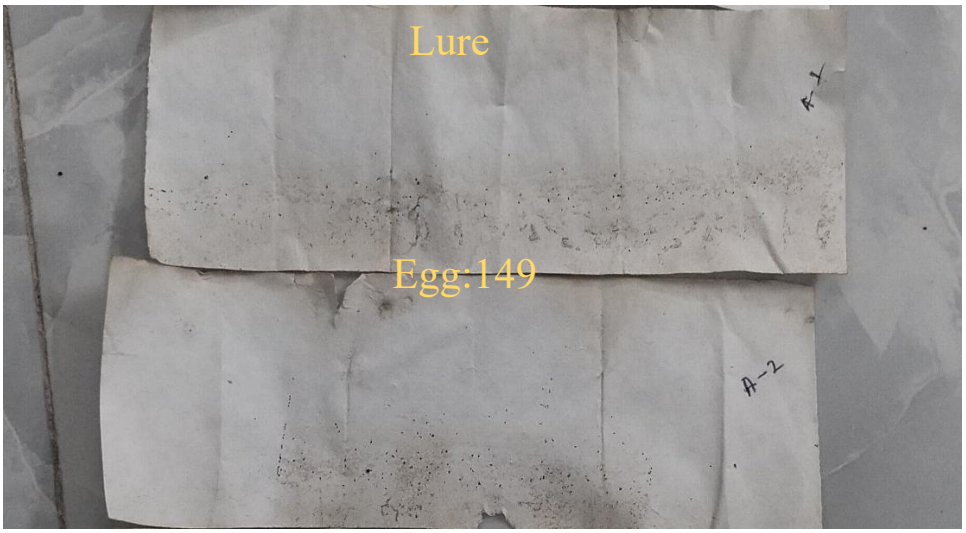
Table 3. Collected *Aedes* Mosquitoes Eggs and Larvae from Den-X-Trap in Week 125 (Oct 23-27, 2026)

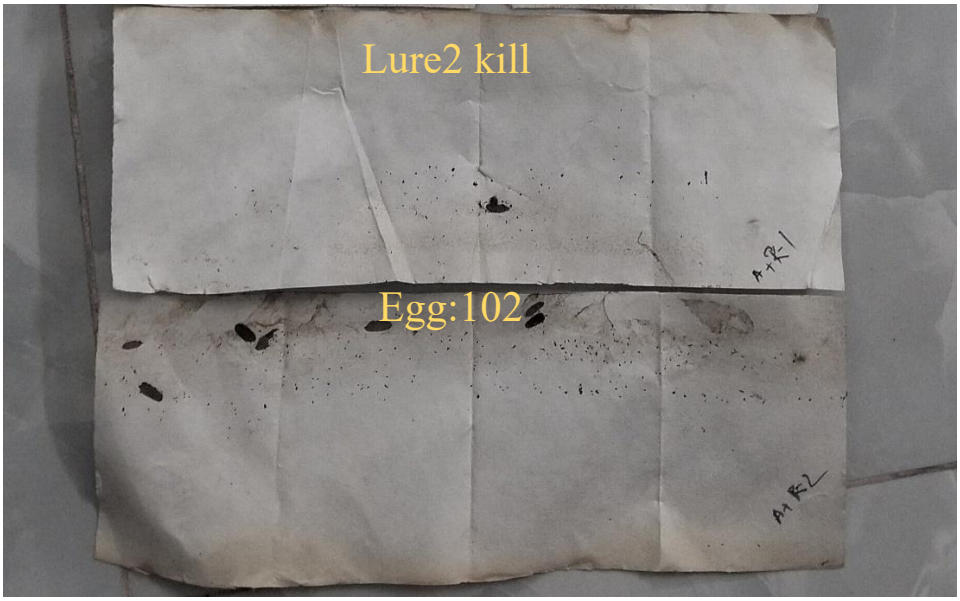
Zone	Only water (Control)		Lure		Lure2Kill	
	Eggs	*Aedes* Larvae	Eggs	*Aedes* Larvae	Eggs	*Aedes* Larvae
1	48	12	150	0	162	0
2	75	0	146	12	32	0
3	96	0	70	16	3	0
4	84	11	268	0	227	0
5	64	0	108	0	85	6
Sub-total	367	23	742	28	509	6
Average	74	5	149	6	102	2



Aedes Mosquitoes Eggs from Den-X-Trap







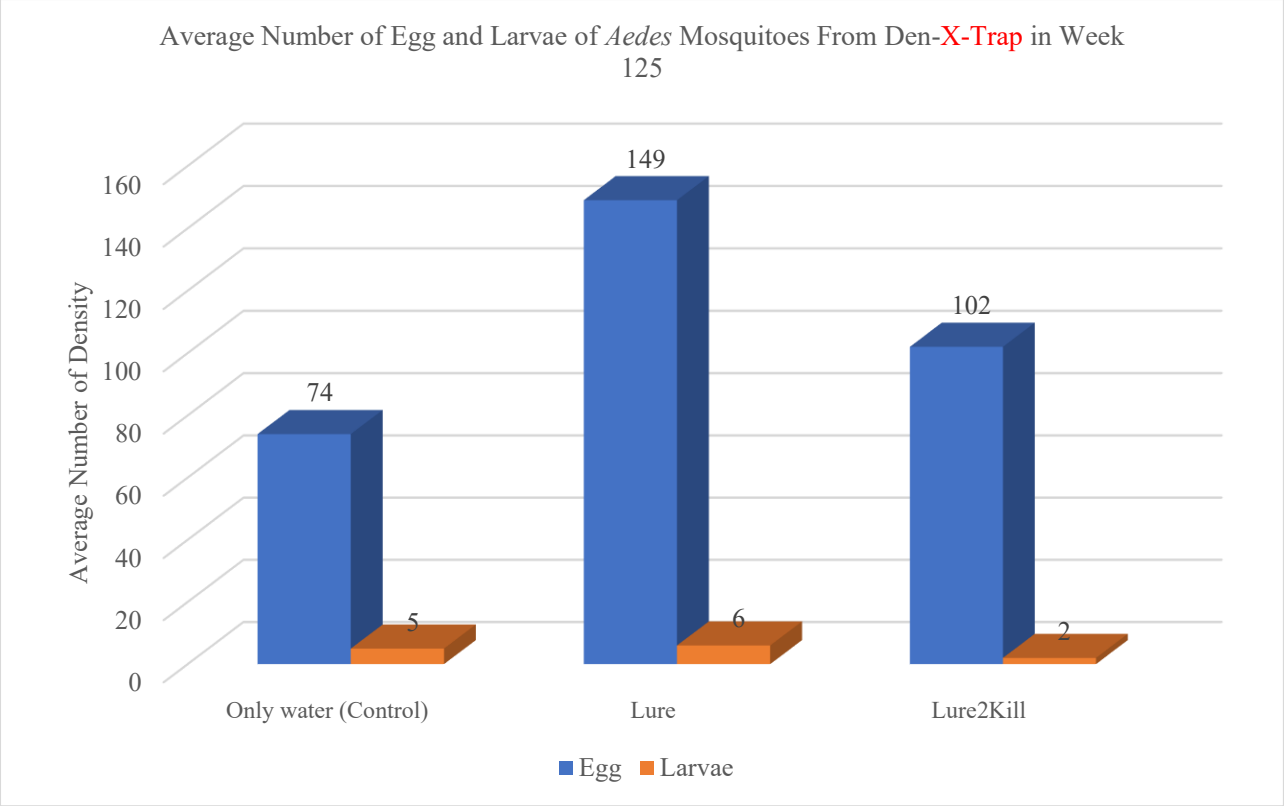


Fig 4: Average number of eggs and larvae of *Aedes* mosquitoes per Den-X-Trap in zones 1-5 in Week 125 (Oct 23-27, 2026)

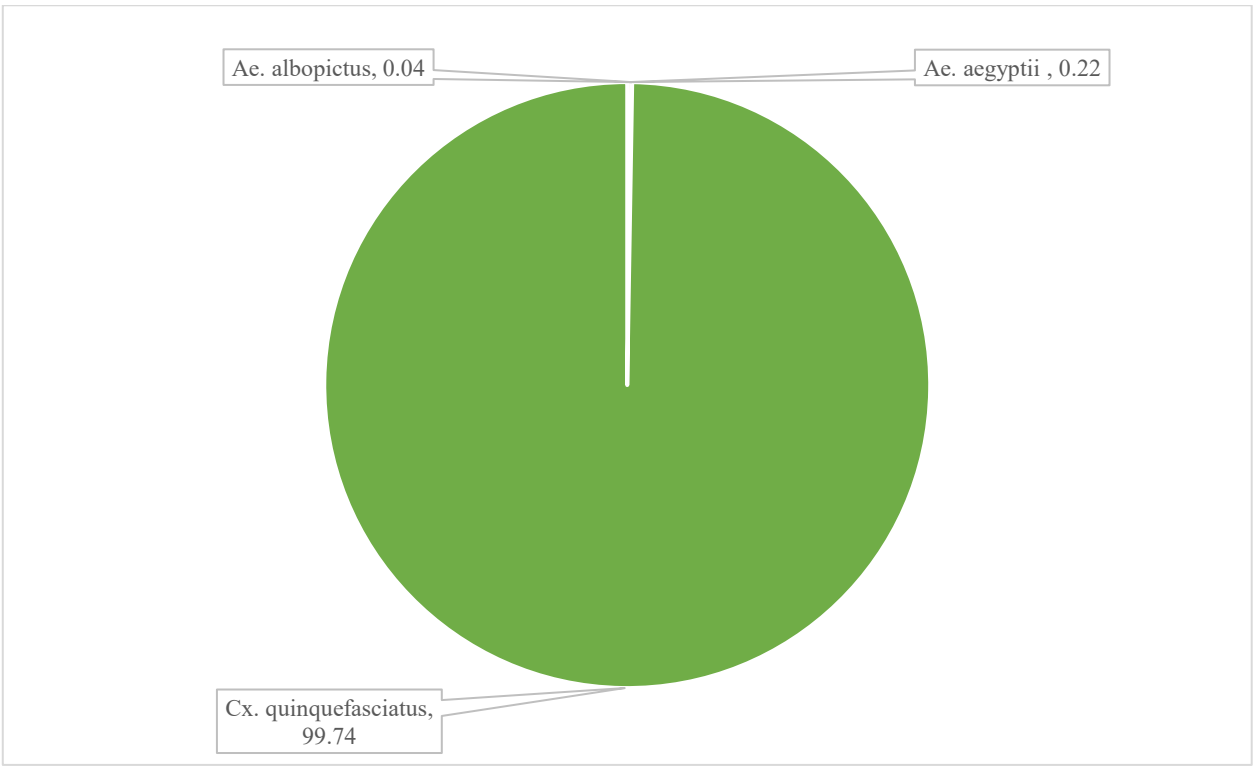
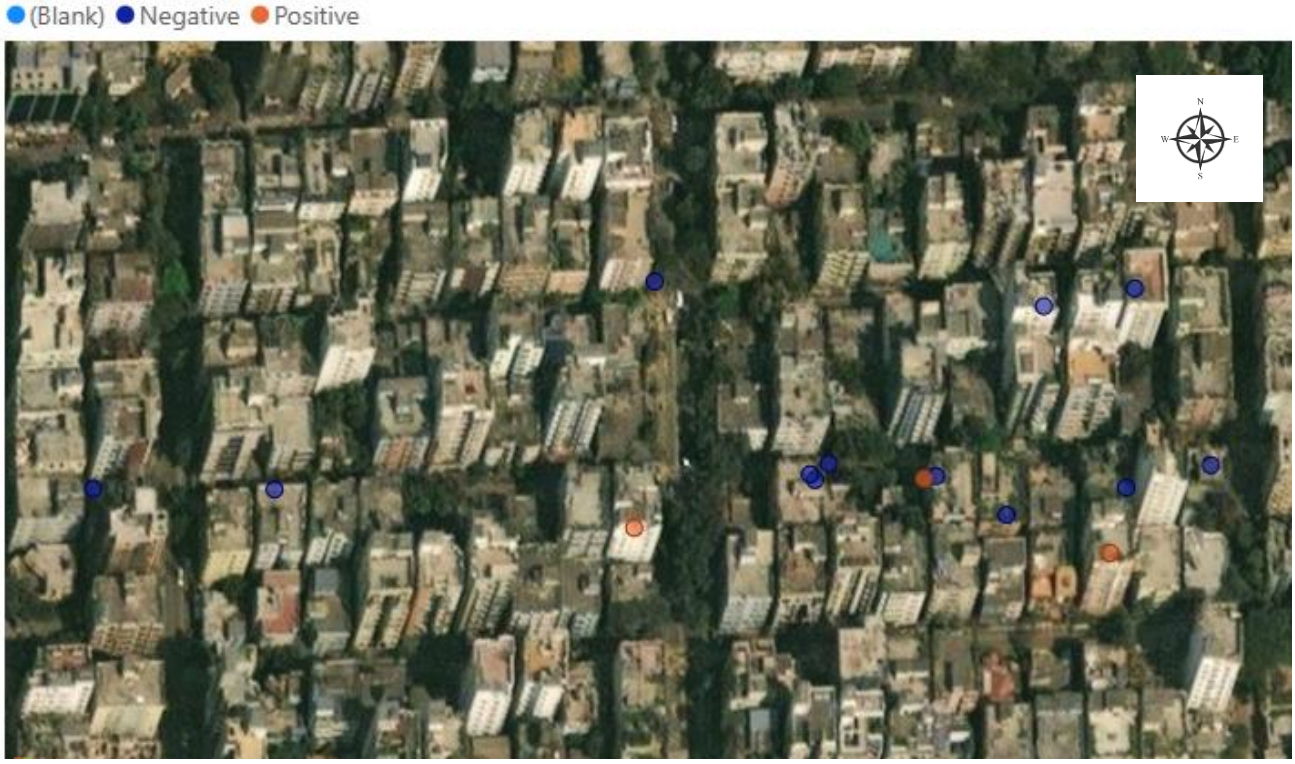


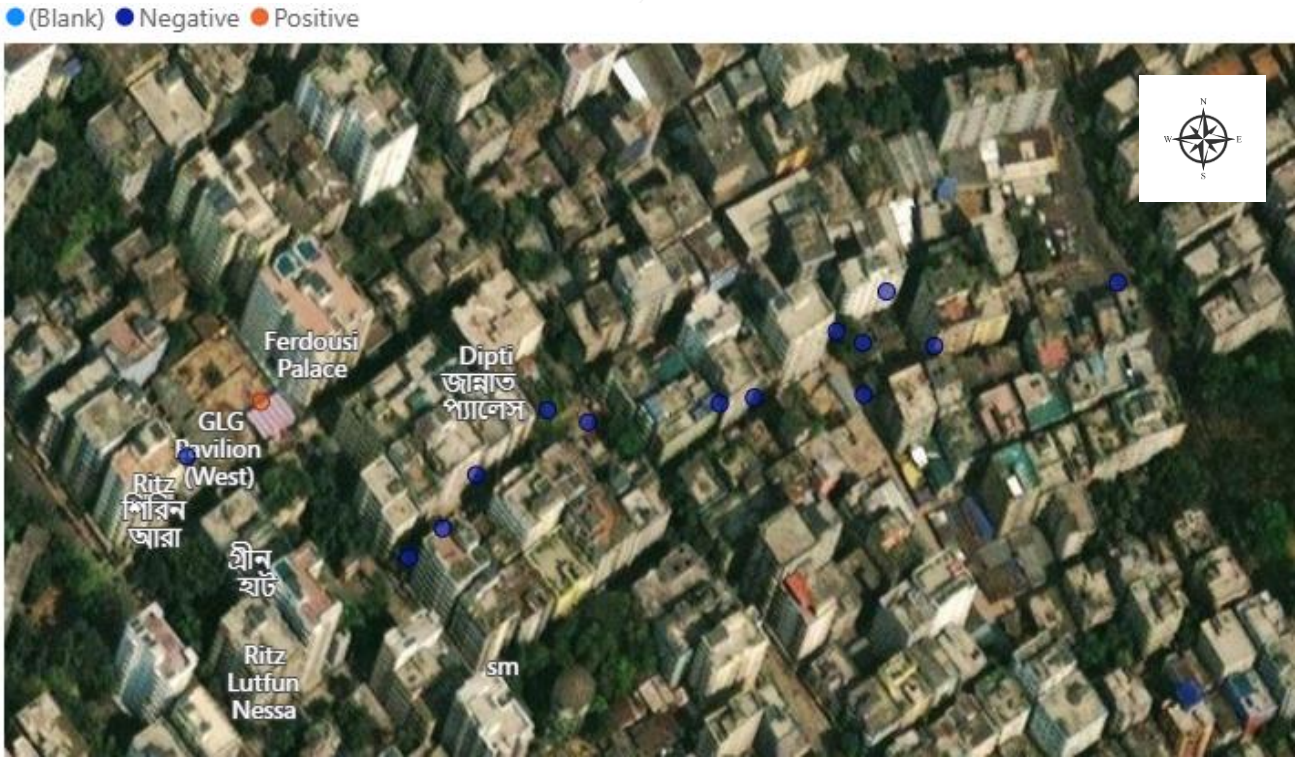
Fig. 5: Percentage of Mosquito Larvae from Zones (1-5) in Week 125 (Oct 23-27, 2026)

Table 4. Positive Larval Spots in Different Zones (1-5) with Estimated Number of Larvae in Week 125 (Oct 23-27, 2026)

Zone	GPS Location	*Ae. aegypti*	*Ae. albopictus*	*Cx. quinquefasciatus*	*Source*
1	23.8634043 90.4030163	21	0	0	Plastic pipe
	23.8635367 90.4038704	23	0	0	Plastic pipe
	23.8633367 90.4044191	52	0	0	Basement/Parking
	total	96	0	0	
2	23.8064859 90.356804	0	15	0	Plastic pipe
	total	0	15	0	
3	23.7859953 90.416439	0	0	105800	Drain
	23.7857517 90.4165905	0	0	5870	Drain
	23.7845084 90.4188555	12	0	0	Basement/Parking
	23.7834767 90.4179478	52	0	0	Pit
	total	64	0	111670	
4	23.7894787 90.3484412	52	0	0	Flooded floor (basement or otherwise)
	23.790119 90.3493915	0	23	0	Pit
	total	52	23	0	
5	23.7593364 90.3581997	0	5	0	Flooded floor (basement or otherwise)
	23.7598163 90.3572123	35	0	0	Flooded floor (basement or otherwise)
	total	35	5	0	
Grand Total		247	43	111670	



Map 1: Positive and Negative House of Uttara 4 No. Sector at Weeks 125



Map 2: Positive and Negative House of Mirpur 2 at Weeks 125



Map 3: Positive and Negative House of Gulshan 1 at Weeks 125



Map 4: Positive and Negative House of Mirpur 1 at Weeks 125



Map 5: Positive and Negative House of Mohammadpur at Weeks 125

Table 5: Positive House, Wet Container, BI, CI and HI in Zones (1-5) in Week 125 (Oct 23-27, 2026)

Zone	Total House	Positive House	Total Wet container	Positive Wet Container	BI	CI	HI
1	15	3	27	4	26.67	14.81	20.00
2	15	1	24	1	6.67	4.17	6.67
3	15	4	30	4	26.67	13.33	26.67
4	15	2	26	2	13.33	7.69	13.33
5	15	2	34	2	13.33	5.88	13.33

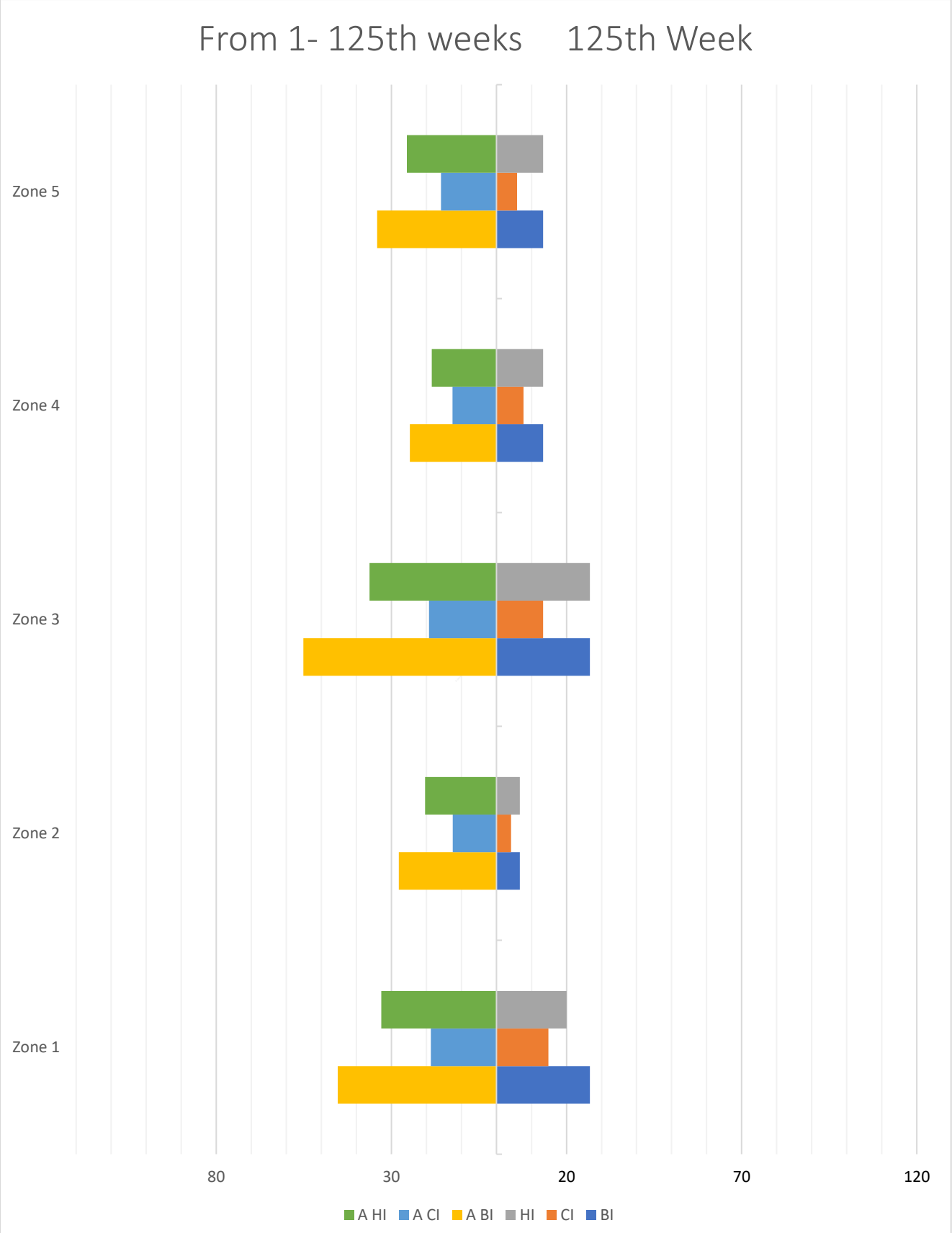


Fig. 6: BI, CI and HI in Different Zones (1-5) of Dhaka north City Corporation

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

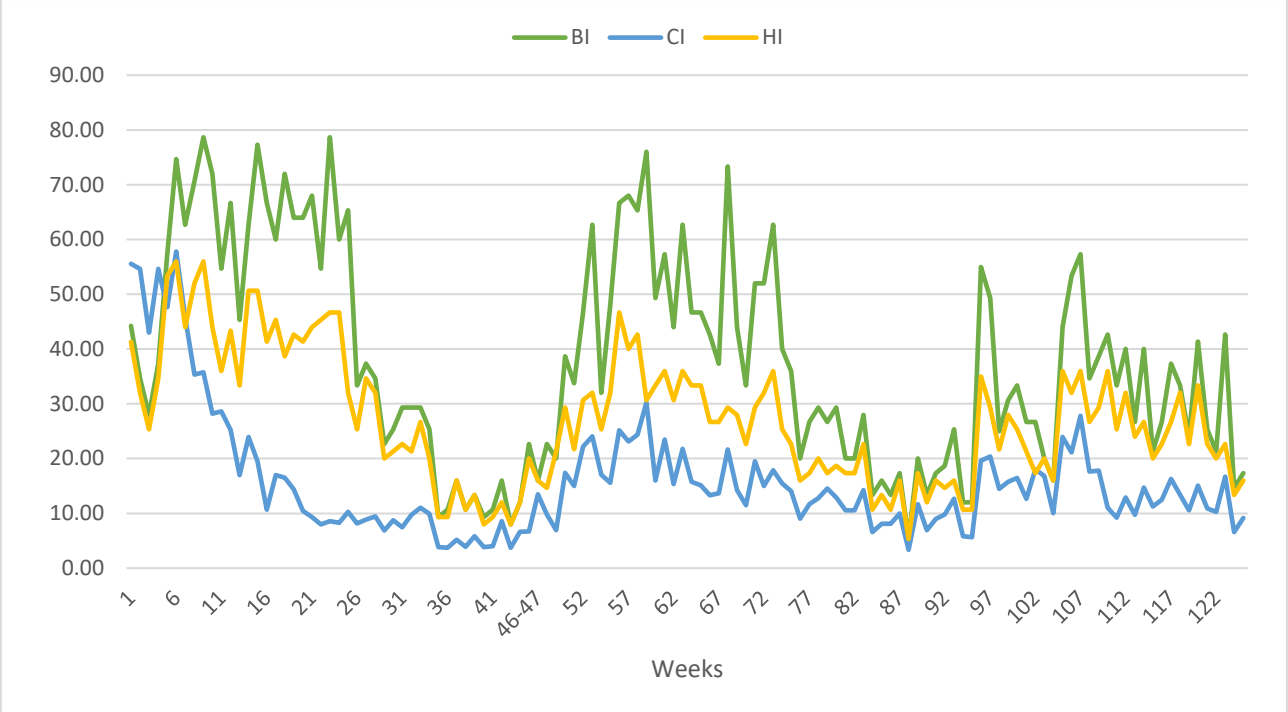


Fig 7: Mosquitoes population fluctuation (BI, CI, HI) from Week 1 to Week 125 (May 2, 2024 – Oct 27, 2026)

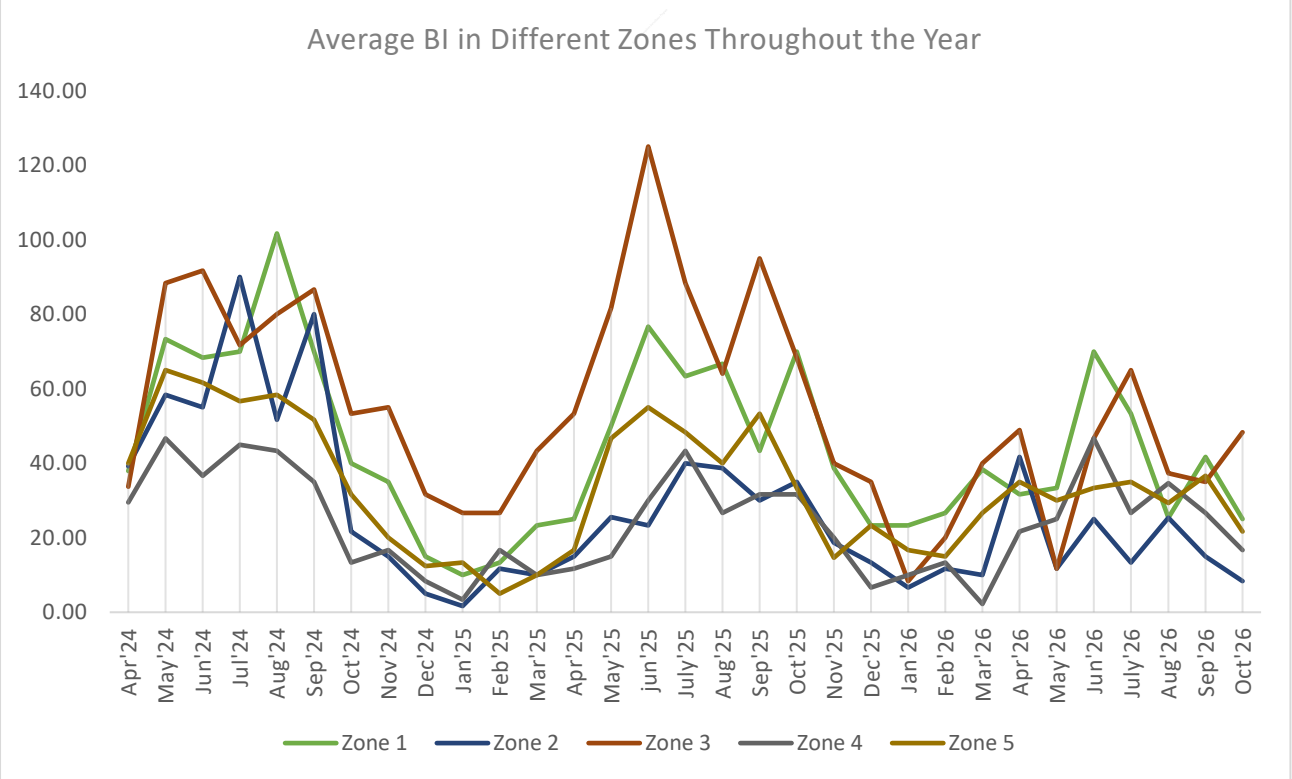


Fig. 8: Breteau Index (BI) in Different from Week 1 to Week 125 (May 2, 2024 – Oct 27, 2026)

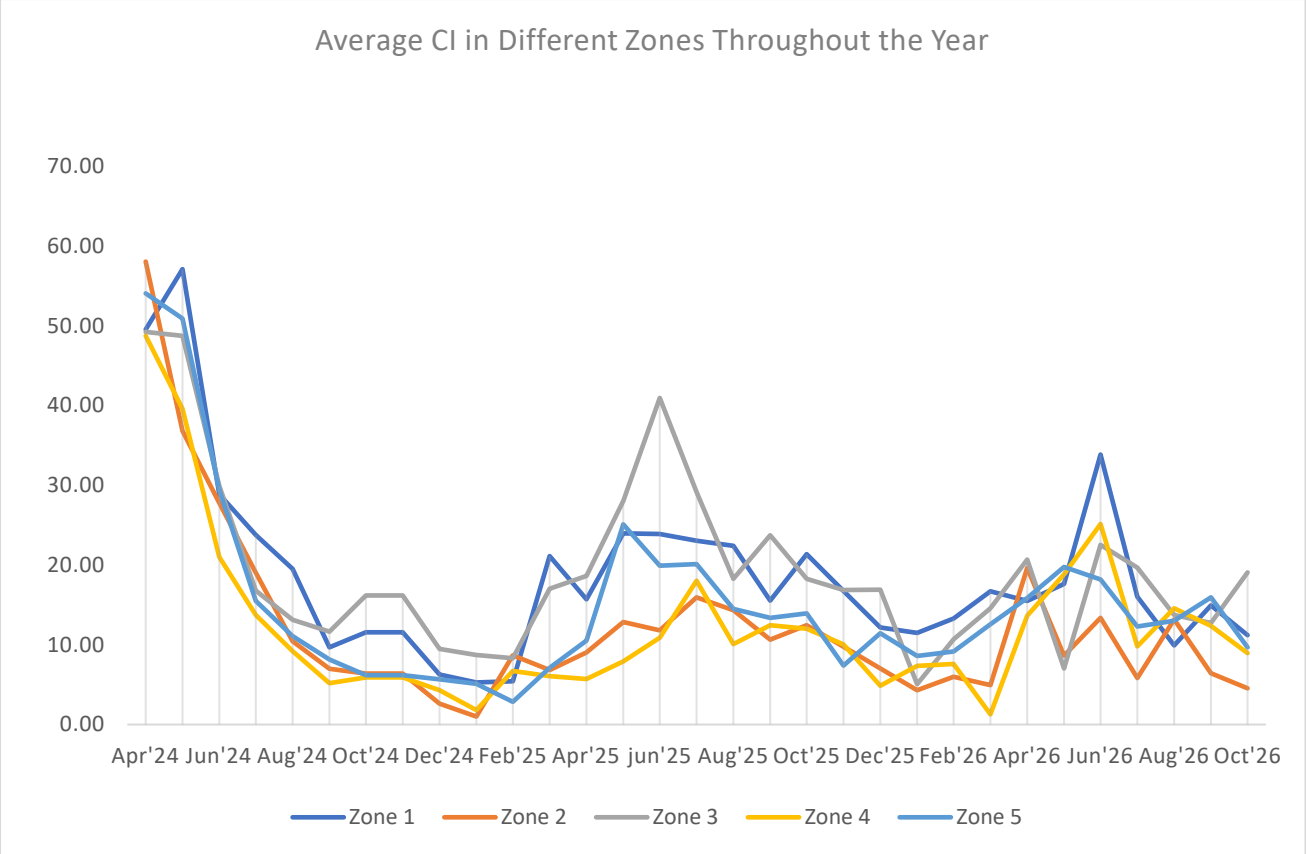


Fig. 9: Container Index (CI) in Different Zones from Week 1 to Week 125 (May 2, 2024 – Oct 27, 2026)

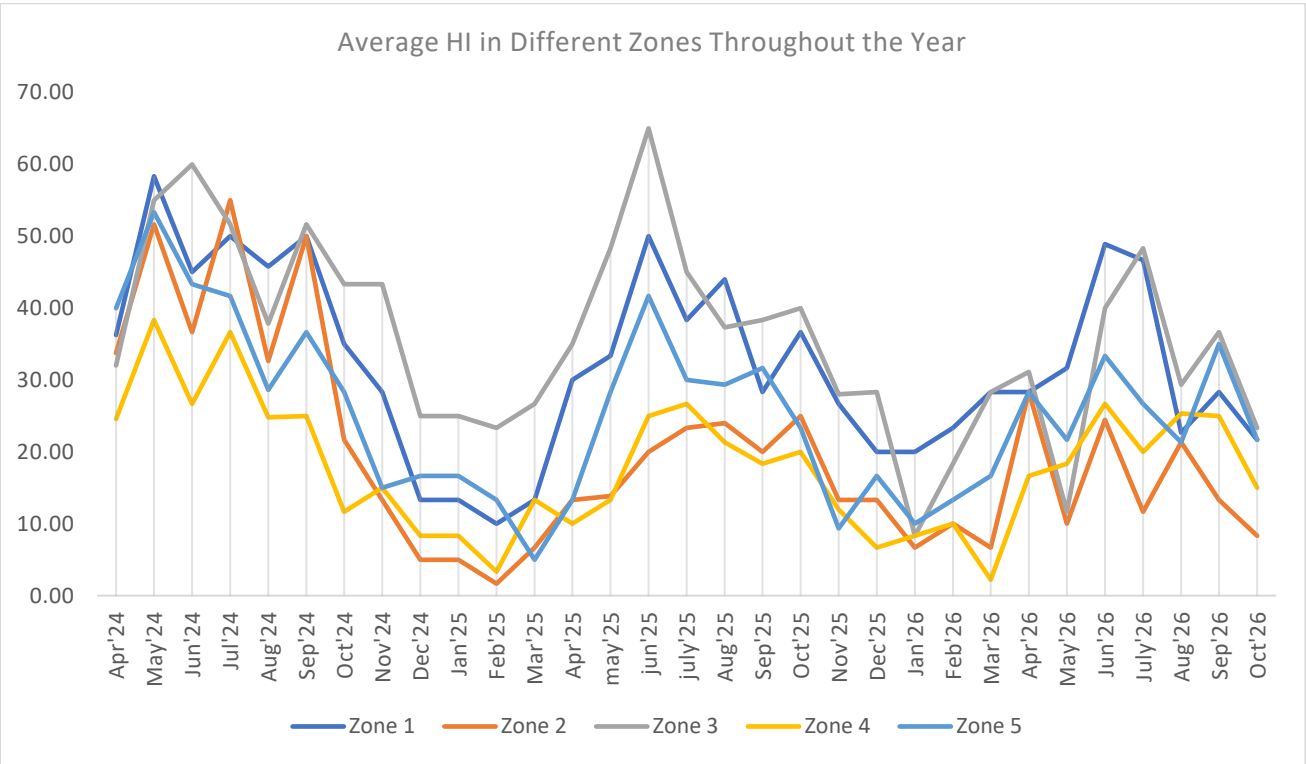


Fig. 10: House Index (HI) in Different Zones from Week 1 to Week 125 (May 2, 2024 – Oct 27, 2026)

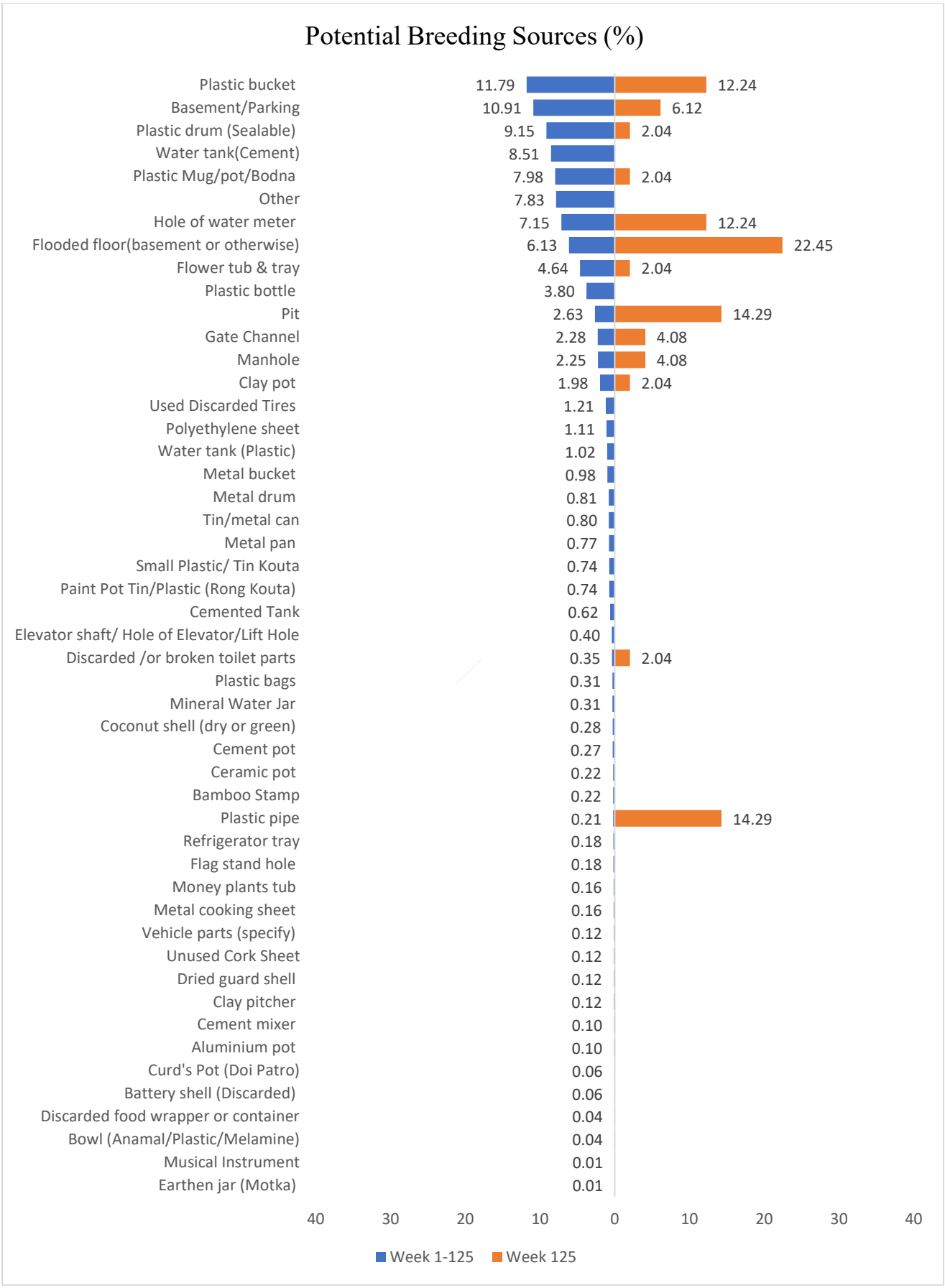


Fig. 11: Container Frequency for *Aedes* mosquitoes in Zones (1-5)

Table 6: Container Productivity of *Aedes* mosquito in DNCC Week 1 to Week 125 (May 2, 2024 – Oct 27, 2026)

Container	Frequency	Total Estimated Aedes Larvae	Percentage of contribution (%)	Relative productivity index	CCPI
Plastic drum (Sealable)	221	41716	22.94	1.00	1.00
Water tank (Cement)	134	21855	12.02	0.52	0.56
Flooded floor (basement or otherwise)	138	17172	9.44	0.41	0.50
Basement/Parking	199	14486	7.97	0.35	0.57
Plastic bucket	211	16875	9.28	0.40	0.62
Plastic bottle	71	8869	4.88	0.21	0.26
Pit	49	7407	4.07	0.18	0.20
Hole of water meter	86	6315	3.47	0.15	0.25
Plastic Mug/pot/Bodna	157	5784	3.18	0.14	0.37
Flower tub & tray	100	4197	2.31	0.10	0.24
Plastic pipe	86	3780	2.08	0.09	0.21
Clay pot	84	3073	1.69	0.07	0.20
Used Discarded Tires	32	2802	1.54	0.07	0.10
Money plants tub	5	2675	1.47	0.06	0.05
Cemented Tank	15	2248	1.24	0.05	0.06
Other	77	3080	1.69	0.07	0.18
Water tank (Plastic)	18	1987	1.09	0.05	0.06
Manhole	44	1944	1.07	0.05	0.11
Elevator shaft/ Hole of Elevator/Lift Hole	3	1294	0.71	0.03	0.02
Polyethylene sheet	33	1344	0.74	0.03	0.08
Tin/metal can	17	1468	0.81	0.04	0.05
Metal bucket	26	1373	0.76	0.03	0.07
Gate Channel	40	1252	0.69	0.03	0.09
Paint Pot Tin/Plastic (Rong Kouta)	24	1078	0.59	0.03	0.06
Cement pot	14	1067	0.59	0.03	0.04
Muddy land	3	754	0.41	0.02	0.02
Metal drum	17	660	0.36	0.02	0.04
Ceramic pot	10	504	0.28	0.01	0.03
Small Plastic/ Tin Kouta	15	503	0.28	0.01	0.03
Drain	7	532	0.29	0.01	0.02
Metal pan	10	484	0.27	0.01	0.03
Discarded /or broken toilet parts	10	325	0.18	0.01	0.02
Dried guard shell	4	307	0.17	0.01	0.01
Bamboo Stamp	10	315	0.17	0.01	0.02
Unused Cork Sheet	5	283	0.16	0.01	0.01
Curd's Pot (Doi Patro)	3	224	0.12	0.01	0.01
Tree Hole	5	183	0.10	0.00	0.01
Refrigerator tray	5	153	0.08	0.00	0.01
Mineral Water Jar	3	144	0.08	0.00	0.01
Bowl (Anamal/Plastic/Melamine)	2	142	0.08	0.00	0.01
Plastic outgoing pipe	4	136	0.07	0.00	0.01
Flag stand hole	5	139	0.08	0.00	0.01
Vehicle parts (specify)	3	100	0.05	0.00	0.01
Plastic bags	5	97	0.05	0.00	0.01
Clay pitcher	3	90	0.05	0.00	0.01
Coconut shell (dry or green)	8	190	0.10	0.00	0.02
Aluminium pot	3	67	0.04	0.00	0.01

Mineral Water Jar	3	63	0.03	0.00	0.01
Metal cooking sheet	5	315	0.17	0.01	0.01

Table 7: Container Productivity of *Aedes* mosquito in DNCC in Week 125 (Oct 23-27, 2026)

Container	Frequency	Total Aedes Larvae	Percentage of contribution (%)	Relative productivity index	CCPI
Flooded floor (basement or otherwise)	3	92	33.33	1.00	1.00
Pit	2	75	27.17	0.82	0.76
Basement/Parking	2	64	23.19	0.70	0.68
Plastic pipe	3	45	16.30	0.49	0.69

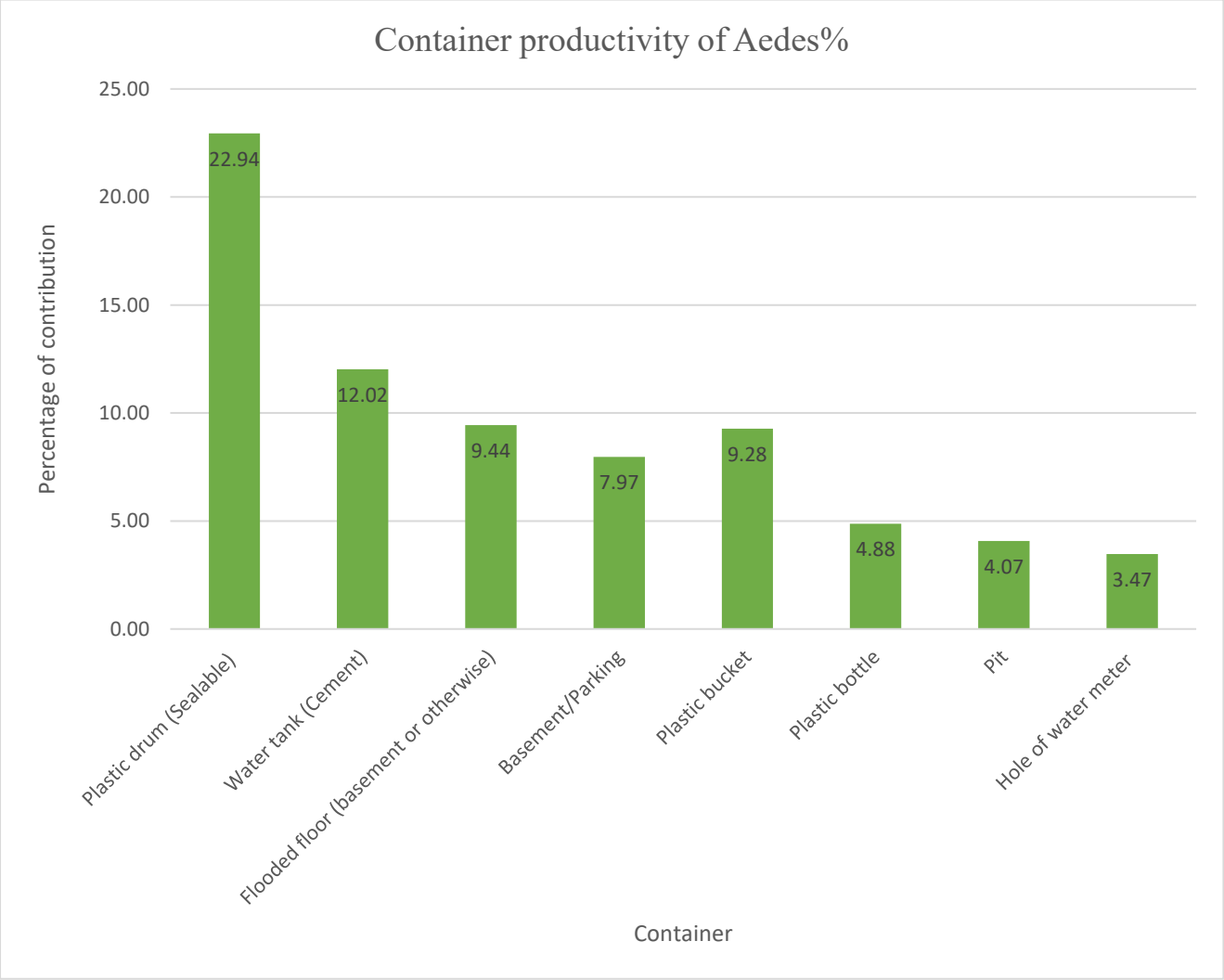
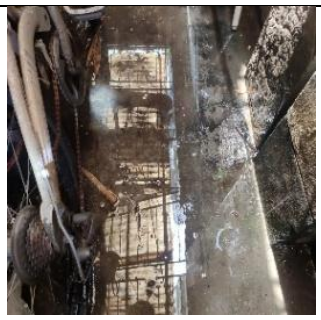
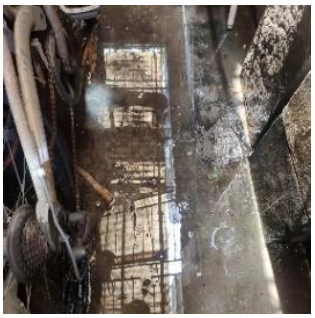


Fig 12: Major container types contributing to Aedes larval production in DNCC in Week 125 (Oct 23-27, 2026)

Table 8: Comparison of the Five highest-CCPI Aedes breeding containers across the overall surveillance period (Weeks 1–125) and the current surveillance Week (Week 125)

Week 1-125	Week 125
 Plastic drum (CCPI=1.00)	 Flooded floor (CCPI=1.00)
 Plastic bucket (CCPI=0.62)	 Pit (CCPI=0.76)
 Basement/Parking (CCPI=0.57)	 Plastic pipe (CCPI=0.69)
 Water tank(cement) (CCPI=0.56)	 Basement/Parking (CCPI=0.68)



Flooded floor (CCPI=0.50)

Table 9: Container Frequency & Probable potential Wet Container in zones (1-5) from Week 1 to Week 125 (May 2, 2024 – Oct 27, 2026)

Sources	+House	-WC	+WC	Total WC	% WC	% PWC
Plastic bucket	273	287	511	798	7.55	11.79
Basement/Parking	259	68	670	738	9.90	10.91
Plastic drum (Sealable)	281	83	536	619	7.92	9.15
Water tank (Cement)	184	257	319	576	4.71	8.51
Plastic Mug/pot/Bodna	224	95	445	540	6.58	7.98
Other	257	138	392	530	5.79	7.83
Hole of water meter	94	31	453	484	6.70	7.15
Flooded floor (basement or otherwise)	155	153	262	415	3.87	6.13
Flower tub & tray	113	32	282	314	4.17	4.64
Plastic bottle	101	64	193	257	2.85	3.80
Pit	83	24	154	178	2.28	2.63
Gate Channel	47	34	120	154	1.77	2.28
Manhole	67	45	107	152	1.58	2.25
Clay pot	98	11	123	134	1.82	1.98
Used Discarded Tires	41	19	63	82	0.93	1.21
Polyethylene sheet	44	3	72	75	1.06	1.11
Water tank (Plastic)	22	28	41	69	0.61	1.02
Metal bucket	32	6	60	66	0.89	0.98
Metal drum	21	8	47	55	0.69	0.81
Tin/metal can	32	0	54	54	0.80	0.80
Metal pan	20	3	49	52	0.72	0.77
Small Plastic/ Tin Kouta	25	9	41	50	0.61	0.74
Paint Pot Tin/Plastic (Rong Kouta)	32	5	45	50	0.67	0.74
Cemented Tank	22	13	29	42	0.43	0.62
Elevator shaft/ Hole of Elevator/Lift Hole	8	4	23	27	0.34	0.40
Discarded /or broken toilet parts	13	3	21	24	0.31	0.35
Plastic bags	8	2	19	21	0.28	0.31
Mineral Water Jar	7	4	17	21	0.25	0.31
Coconut shell (dry or green)	7	0	19	19	0.28	0.28
Cement pot	11	3	15	18	0.22	0.27
Ceramic pot	13	0	15	15	0.22	0.22
Bamboo Stamp	11	0	15	15	0.22	0.22
Plastic pipe	5	0	14	14	0.21	0.21

Refrigerator tray	9	0	12	12	0.18	0.18
Flag stand hole	8	1	11	12	0.16	0.18
Money plants tub	8	0	11	11	0.16	0.16
Metal cooking sheet	5	0	11	11	0.16	0.16
Vehicle parts (specify)	5	1	7	8	0.10	0.12
Unused Cork Sheet	6	1	7	8	0.10	0.12
Dried guard shell	5	0	8	8	0.12	0.12
Clay pitcher	6	1	7	8	0.10	0.12
Aluminium pot	4	0	7	7	0.10	0.10
Cement mixer	2	0	7	7	0.10	0.10
Curd's Pot (Doi Patro)	3	0	4	4	0.06	0.06
Battery shell (Discarded)	0	0	4	4	0.06	0.06
Discarded food wrapper or container	1	1	2	3	0.03	0.04
Bowl (Anamal/Plastic/Melamine)	3	0	3	3	0.04	0.04
Musical Instrument	1	0	1	1	0.01	0.01
Earthen jar (Motka)	1	0	1	1	0.01	0.01

Table 10: Percentage of breeding sources in different zone from Week 1 to Week 125 (May 2, 2024 – Oct 27, 2026)

Containers	Percentage of Breeding Sources				
	Zone 01	Zone 02	Zone 03	Zone 04	Zone 05
Plastic bucket	2.14	2.13	2.11	2.94	2.47
Basement/Parking	2.75	1.63	2.97	1.06	2.50
Plastic drum (Sealable)	1.27	2.28	1.48	2.17	1.95
Water tank (Cement)	1.08	1.46	1.15	2.44	2.38
Plastic Mug/pot/Bodna	1.60	1.30	1.48	2.13	1.48
Other	2.47	1.37	2.17	0.69	1.12
Hole of water meter	0.84	1.27	0.47	2.17	2.39
Flooded floor (basement or otherwise)	1.51	1.36	1.09	0.78	1.39
Flower tub & tray	1.20	0.68	1.57	0.83	0.37
Plastic bottle	0.56	0.84	0.56	0.99	0.84
Pit	0.65	0.37	0.90	0.34	0.37
Gate Channel	0.92	0.22	0.56	0.06	0.52
Manhole	0.77	0.22	0.83	0.21	0.22
Clay pot	0.27	0.35	0.55	0.37	0.44
Used Discarded Tires	0.38	0.34	0.19	0.16	0.13
Polyethylene sheet	0.31	0.27	0.22	0.24	0.07
Water tank (Plastic)	0.00	0.61	0.15	0.13	0.13
Metal bucket	0.16	0.12	0.28	0.24	0.18
Metal drum	0.19	0.13	0.16	0.22	0.10
Tin/metal can	0.24	0.21	0.16	0.15	0.04
Metal pan	0.18	0.15	0.22	0.09	0.13
Paint Pot Tin/Plastic (Rong Kouta)	0.18	0.07	0.21	0.16	0.12
Small Plastic/ Tin Kouta	0.19	0.13	0.22	0.09	0.10
Cemented Tank	0.12	0.09	0.15	0.18	0.09
Elevator shaft/ Hole of Elevator/Lift Hole	0.18	0.10	0.06	0.00	0.06
Discarded /or broken toilet parts	0.04	0.12	0.06	0.03	0.10
Mineral Water Jar	0.04	0.01	0.04	0.13	0.07
Plastic bags	0.03	0.01	0.06	0.13	0.07
Cement pot	0.04	0.06	0.07	0.03	0.07
Coconut shell (dry or green)	0.04	0.01	0.09	0.01	0.10
Bamboo Stamp	0.06	0.07	0.03	0.06	0.00

Ceramic pot	0.06	0.01	0.04	0.01	0.09
Refrigerator tray	0.06	0.06	0.01	0.01	0.06
Flag stand hole	0.09	0.01	0.04	0.00	0.03
Money plants tub	0.06	0.03	0.04	0.03	0.01
Metal cooking sheet	0.01	0.01	0.04	0.03	0.06
Clay pitcher	0.04	0.03	0.04	0.00	0.04
Dried guard shell	0.04	0.00	0.03	0.03	0.01
Unused Cork Sheet	0.03	0.01	0.06	0.00	0.01
Vehicle parts (specify)	0.00	0.01	0.03	0.03	0.04
Aluminium pot	0.01	0.00	0.04	0.04	0.01
Cement mixer	0.01	0.03	0.00	0.04	0.01
Curd's Pot (Doi Patro)	0.00	0.03	0.03	0.01	0.03
Bowl (Anamal/Plastic/Melamine)	0.01	0.00	0.01	0.01	0.01
Battery shell (Discarded)	0.01	0.01	0.03	0.00	0.00
Discarded food wrapper or container	0.01	0.01	0.00	0.01	0.00
Earthen jar (Motka)	0.00	0.00	0.03	0.00	0.01
Musical Instrument	0.01	0.00	0.00	0.00	0.00
Plastic pipe	0.01	0.00	0.00	0.00	0.00

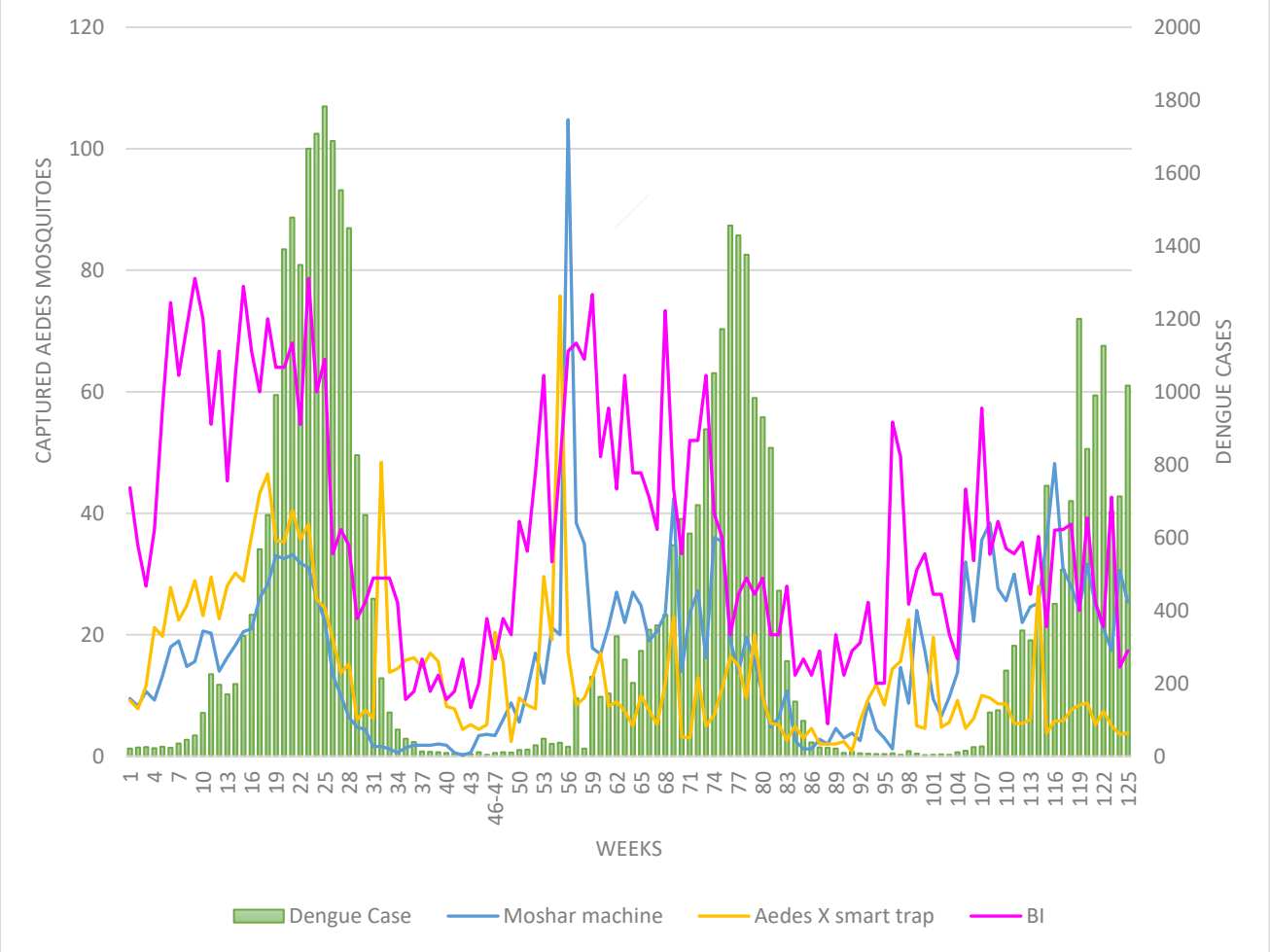


Fig. 13: Correlation between Dengue Cases and *Aedes* Mosquitoes Captured by per Moshar Machine CO_2 traps, Aedes X smart traps

NB: DNCC dengue cases only

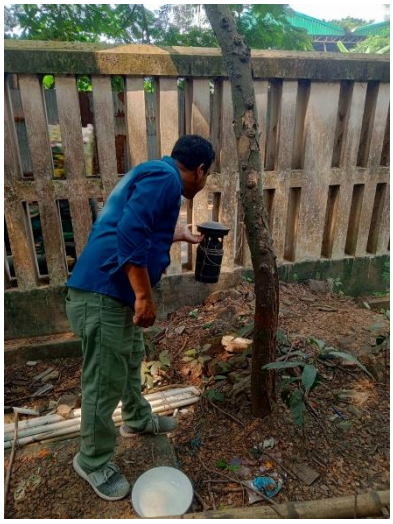
Photographs of Mosquitoes Surveillance











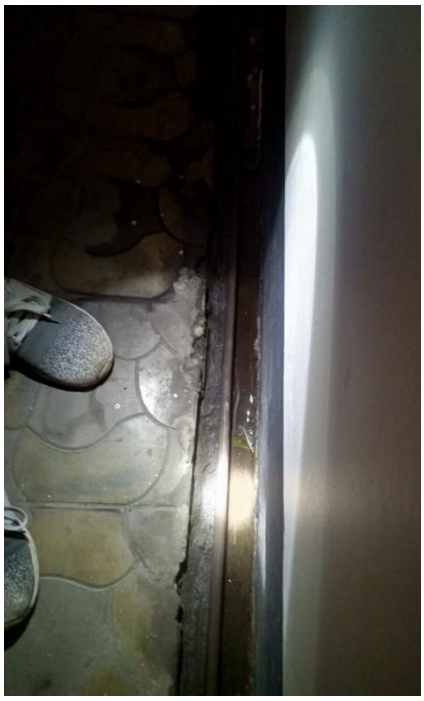








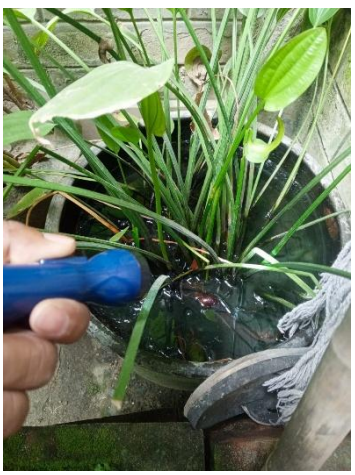
Samples Collection from Field









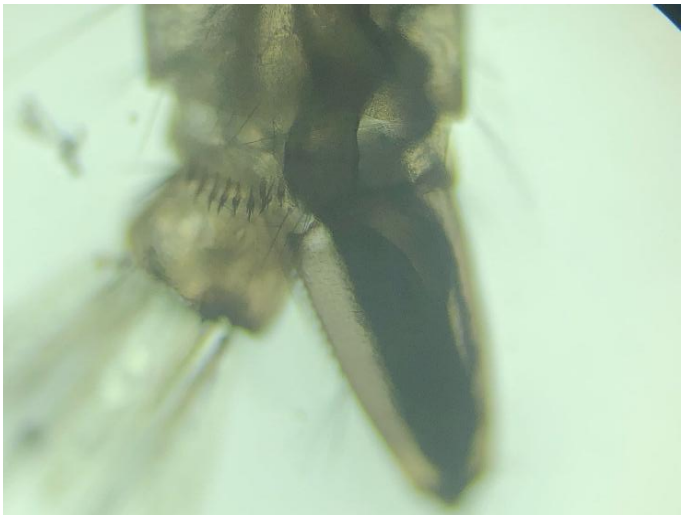


Samples Processing and Identification















Comments:

The mosquito density is decreased and the dengue cases increasing rapidly. The Breteau Index (BI) is increased in week 125. 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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