Weekly Report on

JU-DNCC Mosquitoes Surveillance Program

Week 126 (Oct 30-31, Nov 1-3, 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

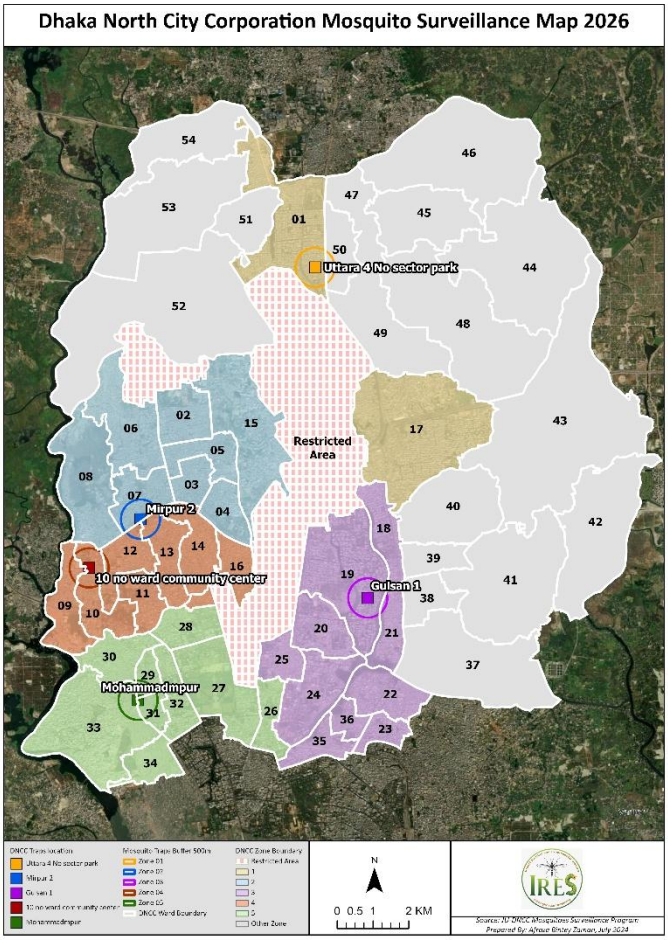
1. Light trap

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 126 (Oct 30-31, Nov 1-3, 2026)

Zone	*Ae. aegypti*	*Ae. albopictus*	*Cx. quinquefasciatus*	*Cx. tritaeniorhynchus*	*Ar. subalbatus*	*Mn. uniformis*	*An. vagus*	*An. annularis*	*Total*	%
1	13	5	6764	1234	72	0	0	0	8088	26.54
2	6	2	1862	476	16	2	3	0	2367	7.77
3	16	3	3236	769	58	1	0	0	4083	13.40
4	12	4	5658	975	19	3	0	0	6671	21.89
5	16	3	7658	1567	12	5	0	6	9267	30.41
Total	63	17	25178	5021	177	11	3	6	30476	100.00
%	0.21	0.06	82.62	16.48	0.58	0.04	0.01	0.02	100.00	

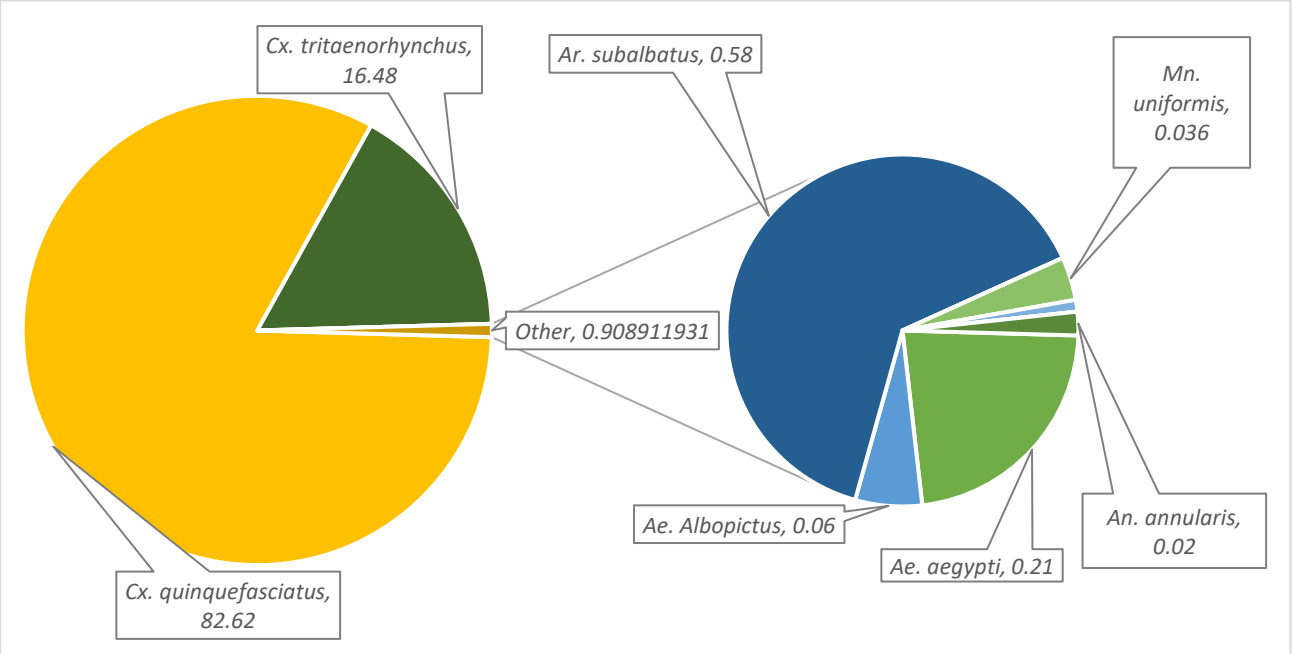


Fig. 1: Percentage of Adult Mosquitoes Collected by Moshar Machine (CO_2) traps in Week 126 (Oct 30-31, Nov 1-3, 2026)

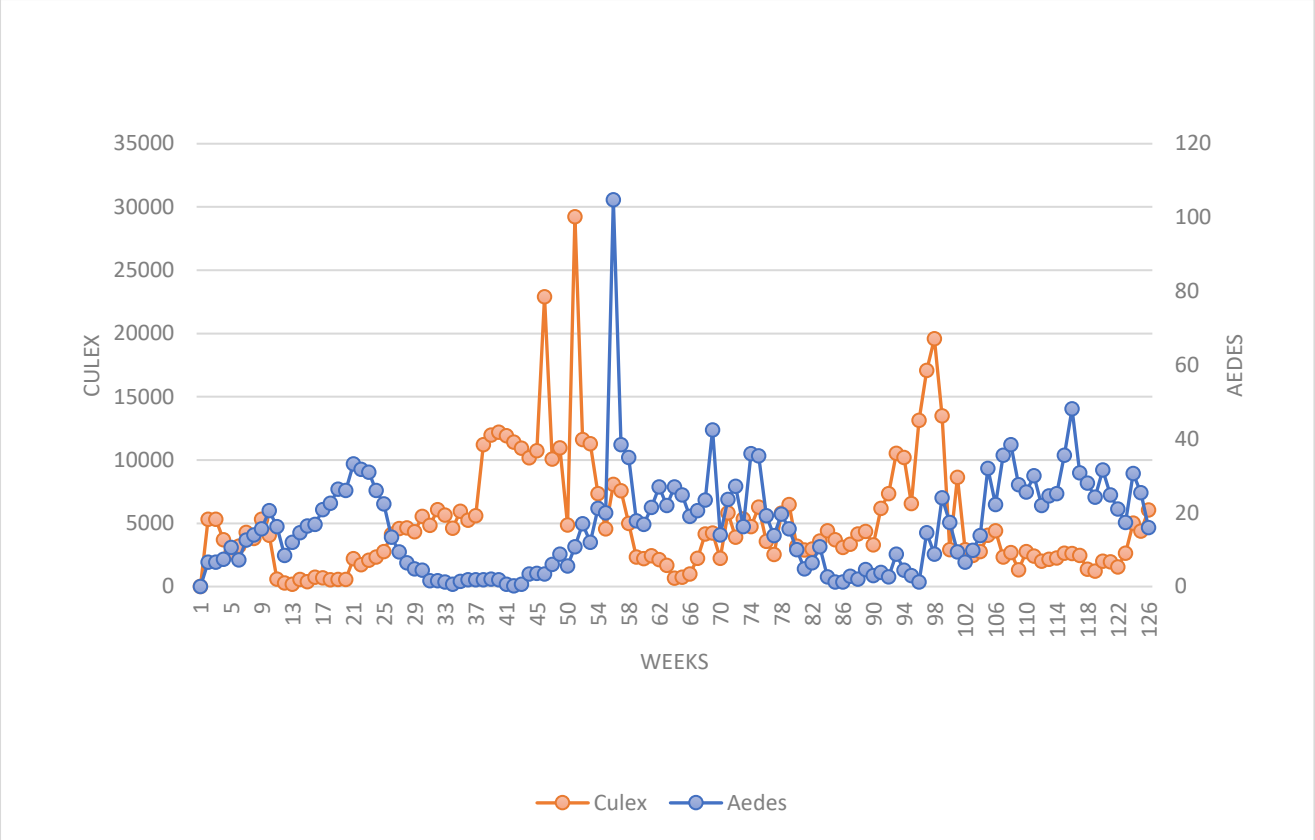


Fig 2: Average number of mosquitoes per Moshar Machine (CO_2) traps from Week 1 to Week 126 (Oct 30-31, Nov 1-3, 2026)

Table 2. Collected Mosquito Larvae from *Aedes* X smart Traps in Week 126 (Oct 30-31, Nov 1-3, 2026)

Zone	N	*Ae. aegypti*	*Ae. albopictus*
1	0	0	0
2	0	0	0
3	0	0	0
4	32	0	32
5	18	16	0
Total	48	16	32
(%)	100	33.33	66.67





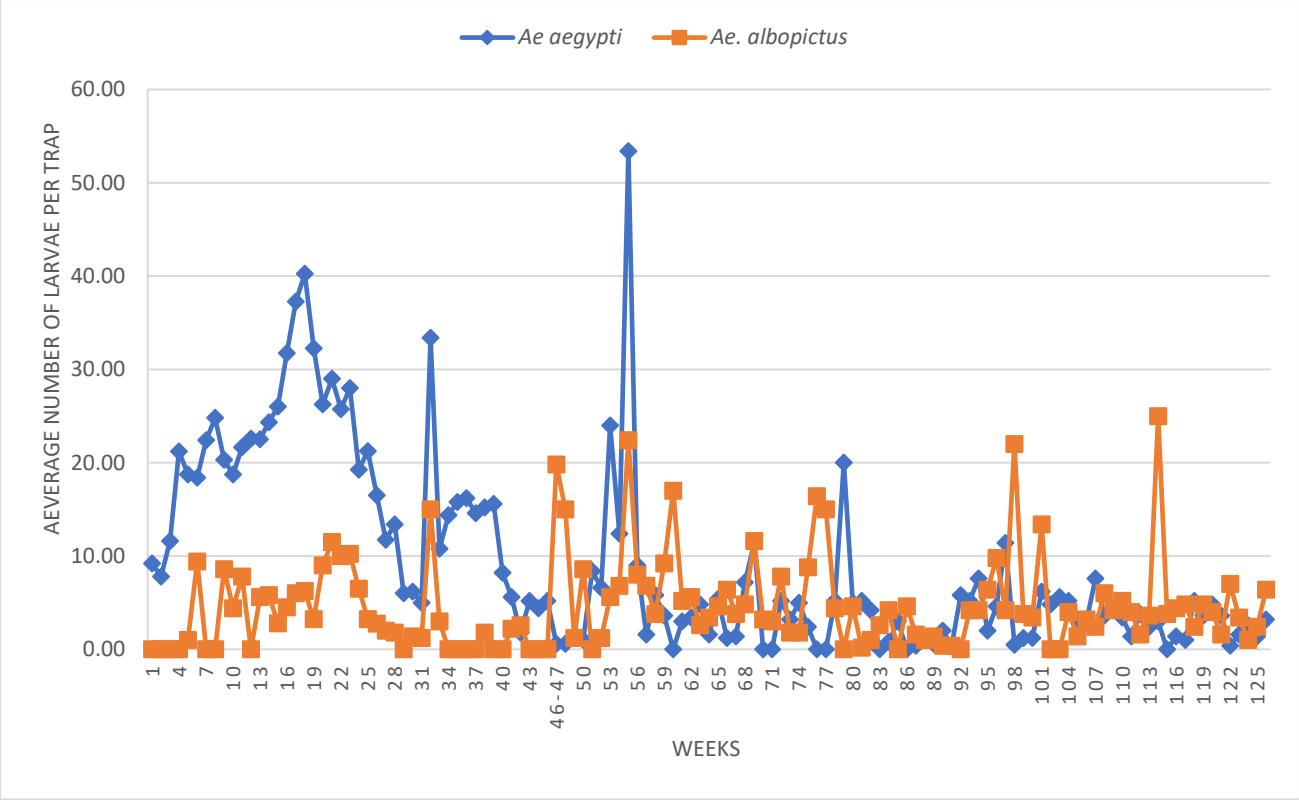


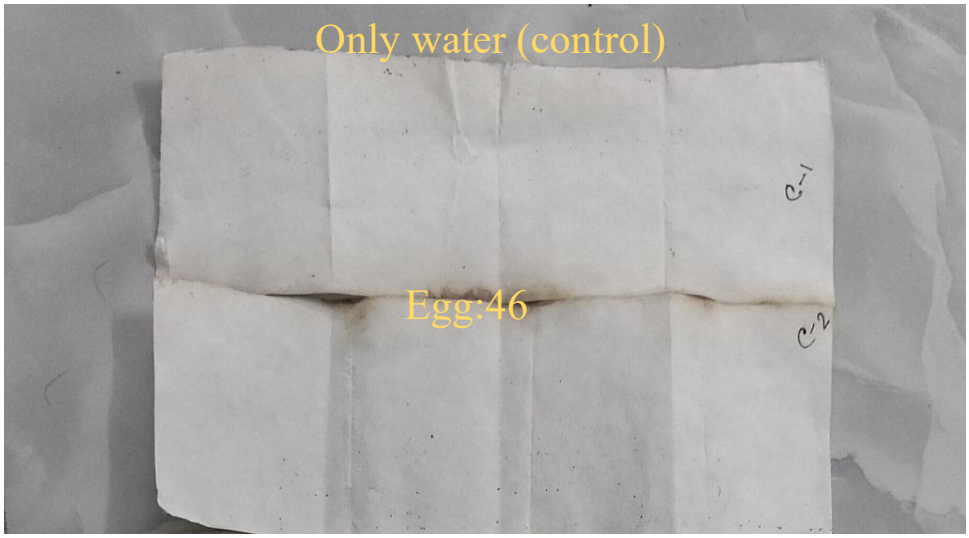
Fig 3: Average Number of *Aedes* Larvae per *Aedes* X Smart Trap in Zones 1-5 from Week 1 to Week 126 (May 2, 2024 – Nov 3, 2026)

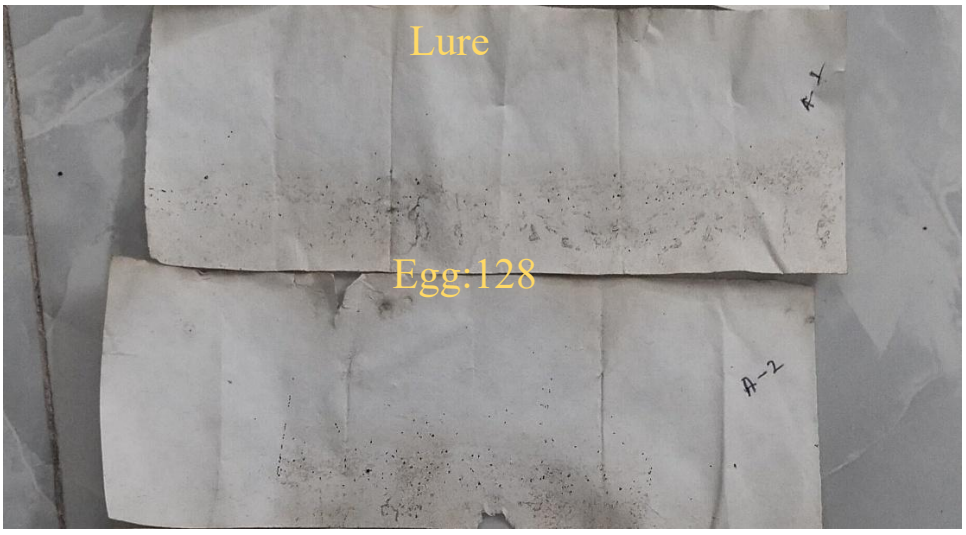
Table 3. Collected *Aedes* Mosquitoes Eggs and Larvae from Den-X-Trap in Week 126 (Oct 30-31, Nov 1-3, 2026)

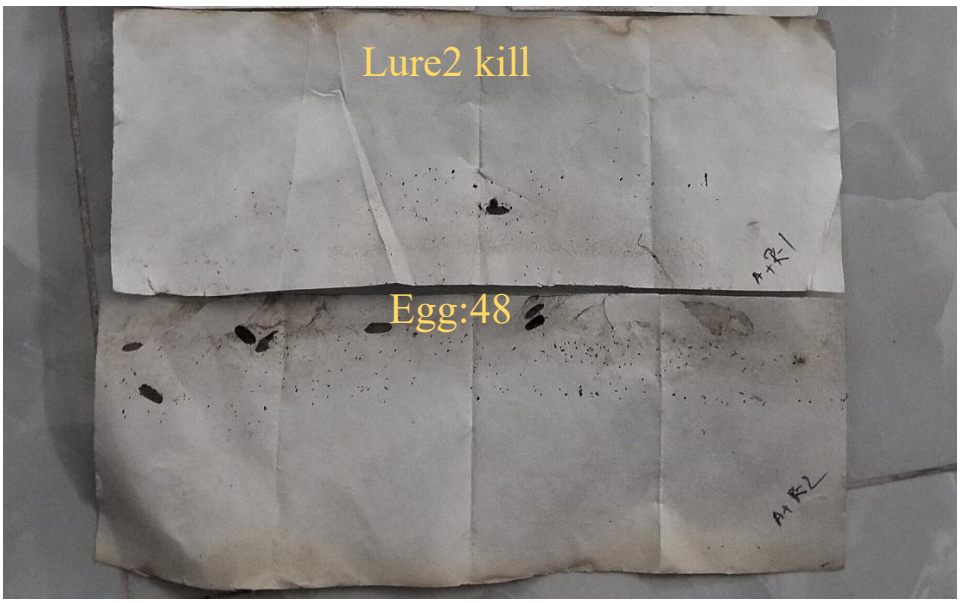
Zone	Only water (Control)		Lure		Lure2Kill	
	Eggs	*Aedes* Larvae	Eggs	*Aedes* Larvae	Eggs	*Aedes* Larvae
1	42	1	245	5	13	5
2	86	0	168	0	42	0
3	2	0	14	0	5	0
4	58	0	165	4	118	0
5	38	11	45	13	59	0
Sub-total	226	12	637	22	237	5
Average	46	3	128	5	48	1



Aedes Mosquitoes Eggs from Den-X-Trap







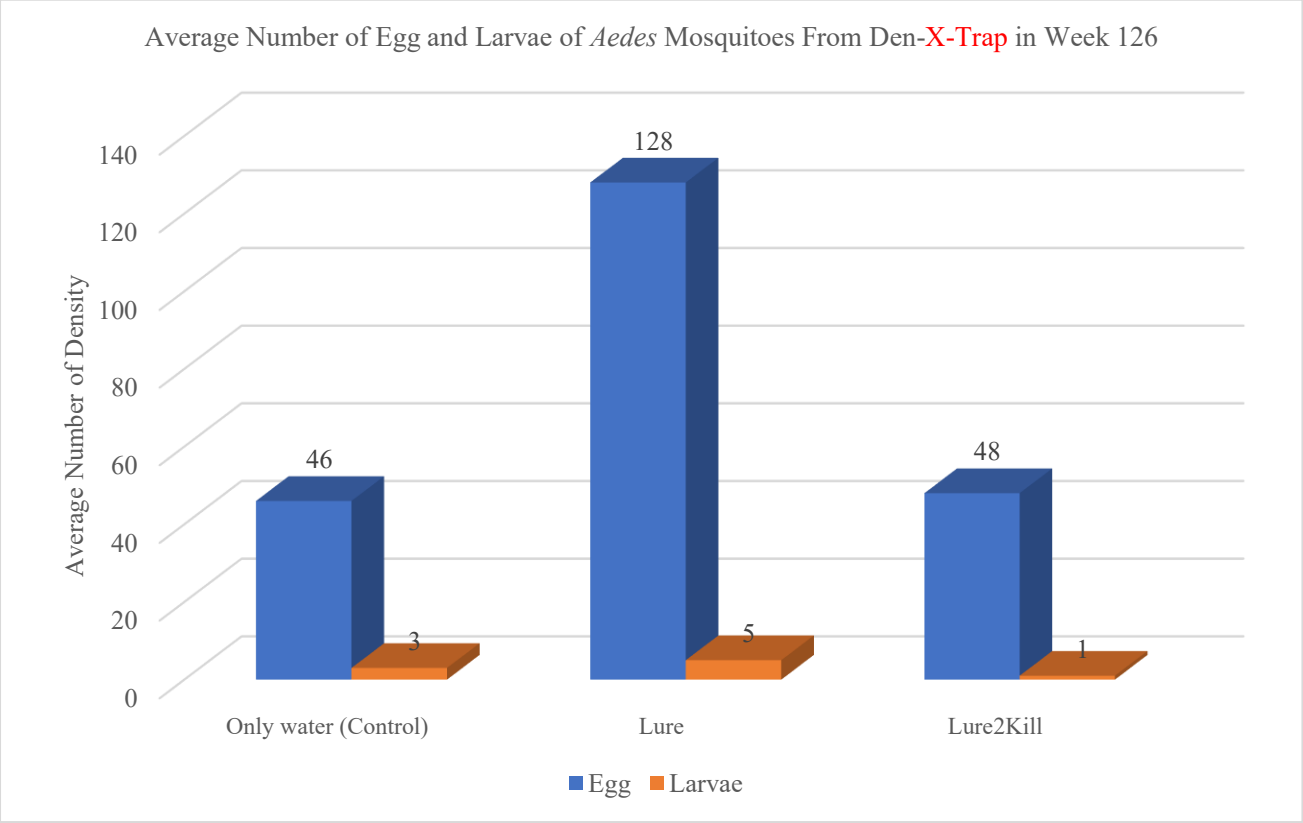


Fig 4: Average number of eggs and larvae of *Aedes* mosquitoes per Den-X-Trap in zones 1-5 in Week 126 (Oct 30-31, Nov 1-3, 2026)

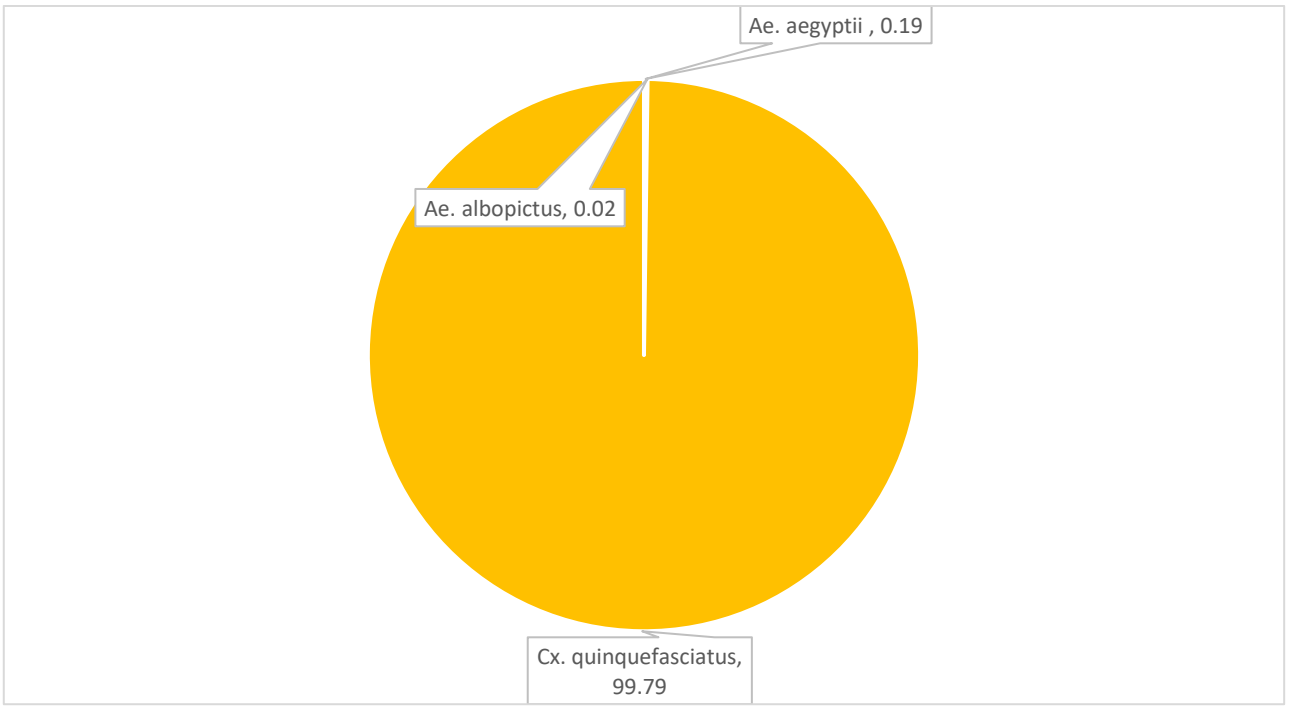


Fig. 5: Percentage of Mosquito Larvae from Zones (1-5) in Week 126 (Oct 30-31, Nov 1-3, 2026)

Table 4. Positive Larval Spots in Different Zones (1-5) with Estimated Number of Larvae in Week 126 (Oct 30-31, Nov 1-3, 2026)

Zone	GPS Location	*Ae. aegypti*	*Ae. albopictus*	*Cx. quinquefasciatus*	*Source*
1	23.865156 90.4014666	23	0	0	Flower tub & tray
	total	23	0	0	
2	23.8052081 90.3551293	14	0	0	Other
	total	14	0	0	
3	23.7847596 90.4161939	254	0	0	Water tank (Cement)
	23.7838641 90.4161137	0	0	200000	Drain
	23.7833311 90.4158337	23	0	0	Plastic pipe
	23.783376 90.4155996	23	0	0	Plastic drum (Sealable)
	23.7834852 90.414784	21	0	0	Plastic pipe
	23.7831383 90.4142629	0	0	3547	Drain
	23.7830365 90.4142686	0	0	1245	Drain
	total	321	0	204792	
5	23.7614299 90.35741	0	21	0	Plastic pipe
	23.7609275 90.3544391	0	12	0	Hole of water meter
	23.7609964 90.3538357	34	0	0	Plastic drum (Sealable)
	total	34	33	0	
Grand Total		392	33	204792	



Map 1: Positive and Negative House of Uttara 4 No. Sector at Weeks 126



Map 2: Positive and Negative House of Mirpur 2 at Weeks 126



Map 3: Positive and Negative House of Gulshan 1 at Weeks 126



Map 4: Positive and Negative House of Mirpur 1 at Weeks 126



Map 5: Positive and Negative House of Mohammadpur at Weeks 126

Table 5: Positive House, Wet Container, BI, CI and HI in Zones (1-5) in Week 126 (Oct 30-31, Nov 1-3, 2026)

Zone	Total House	Positive House	Total Wet container	Positive Wet Container	BI	CI	HI
1	15	1	31	1	6.67	3.23	6.67
2	15	1	26	1	6.67	3.85	6.67
3	15	8	42	9	60.00	21.43	53.33
4	15	0	24	0	0.00	0.00	0.00
5	15	3	31	3	20.00	9.68	20.00

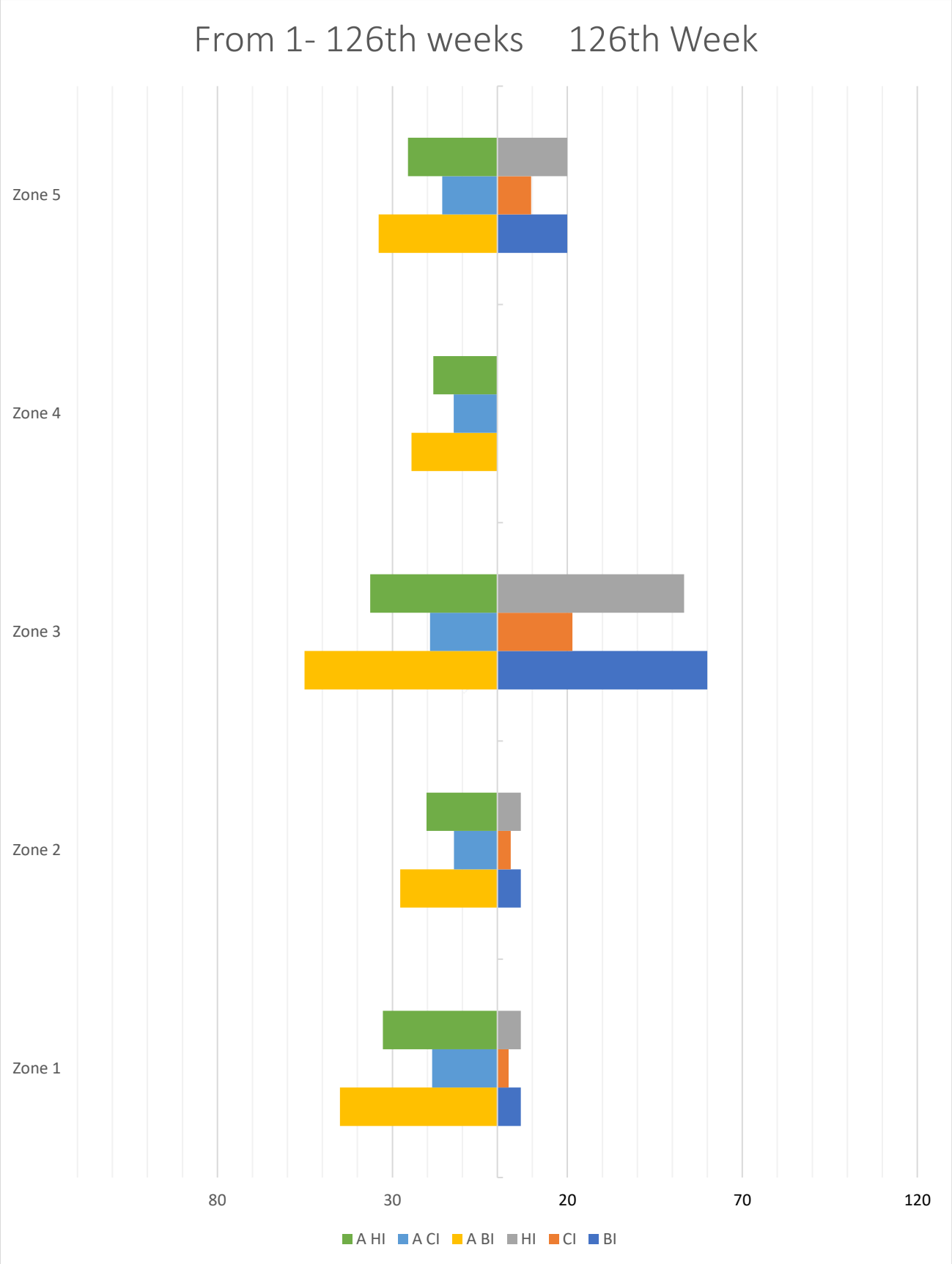


Fig. 6: BI, CI and HI in Different Zones (1-5) of Dhaka north City Corporation

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

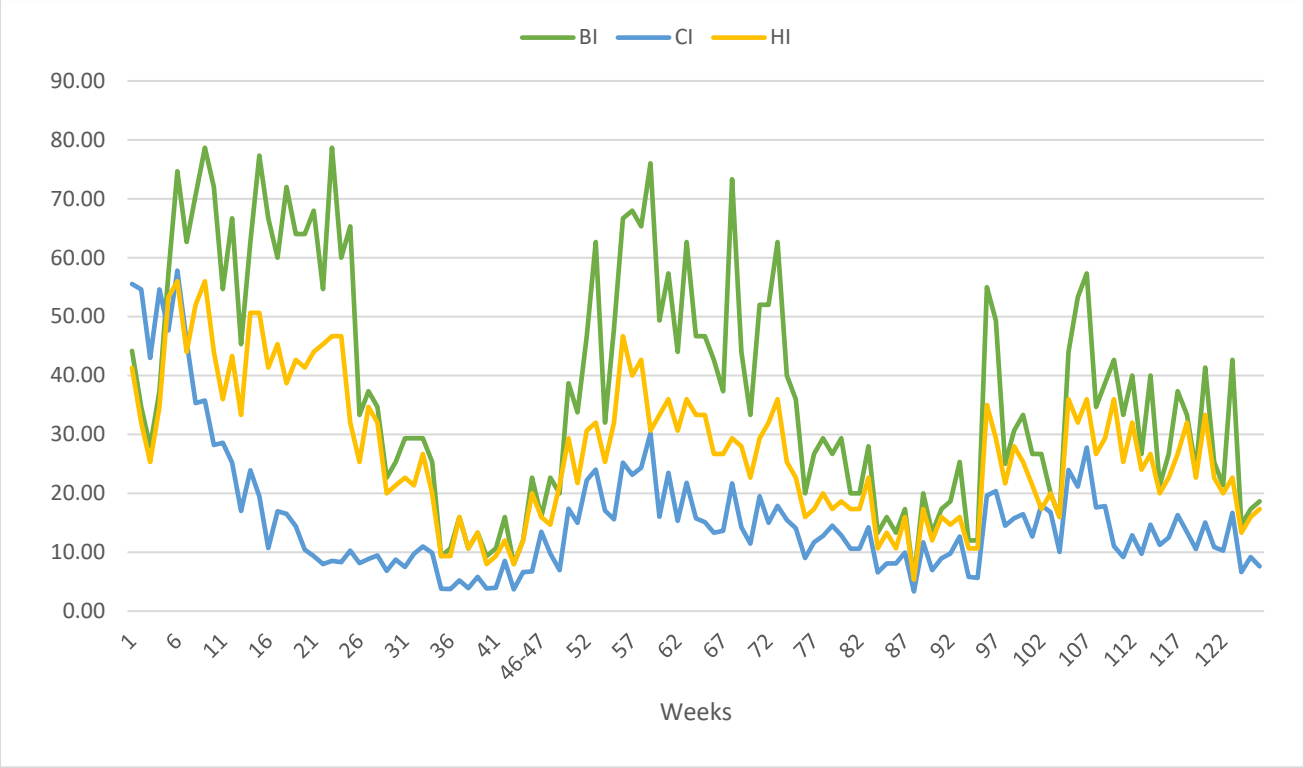


Fig 7: Mosquitoes population fluctuation (BI, CI, HI) from Week 1 to Week 126 (May 2, 2024 – Nov 3, 2026)

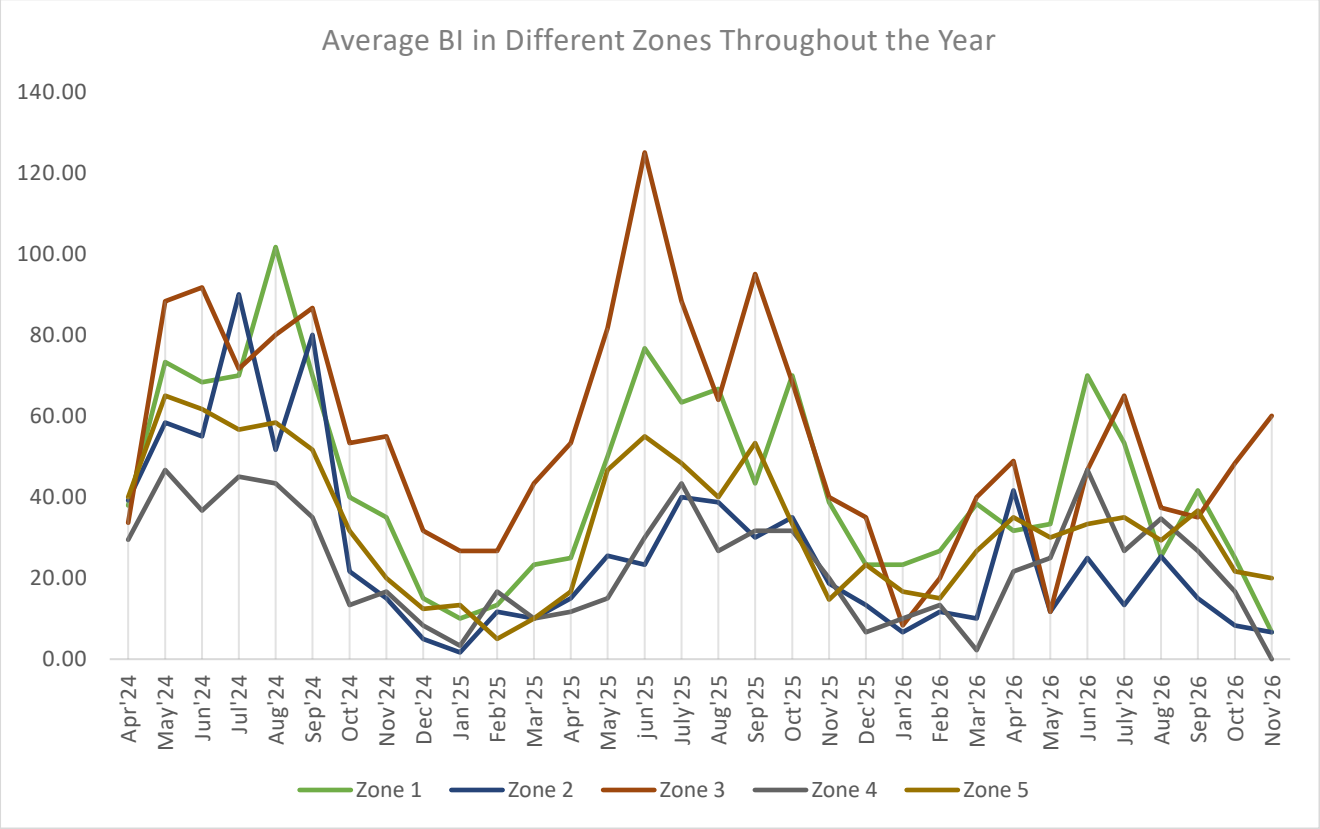


Fig. 8: Breteau Index (BI) in Different from Week 1 to Week 126 (May 2, 2024 – Nov 3, 2026)

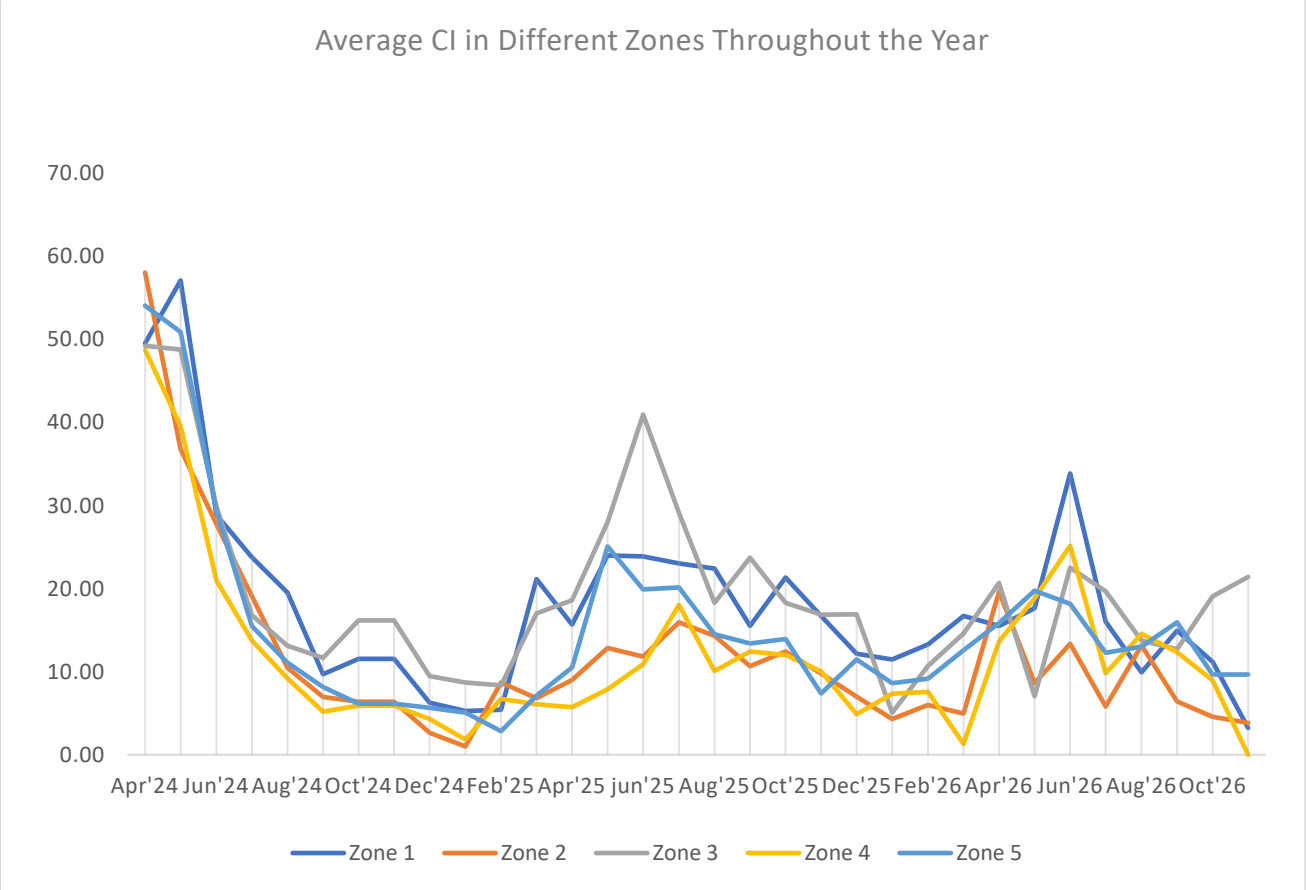


Fig. 9: Container Index (CI) in Different Zones from Week 1 to Week 126 (May 2, 2024 – Nov 3, 2026)

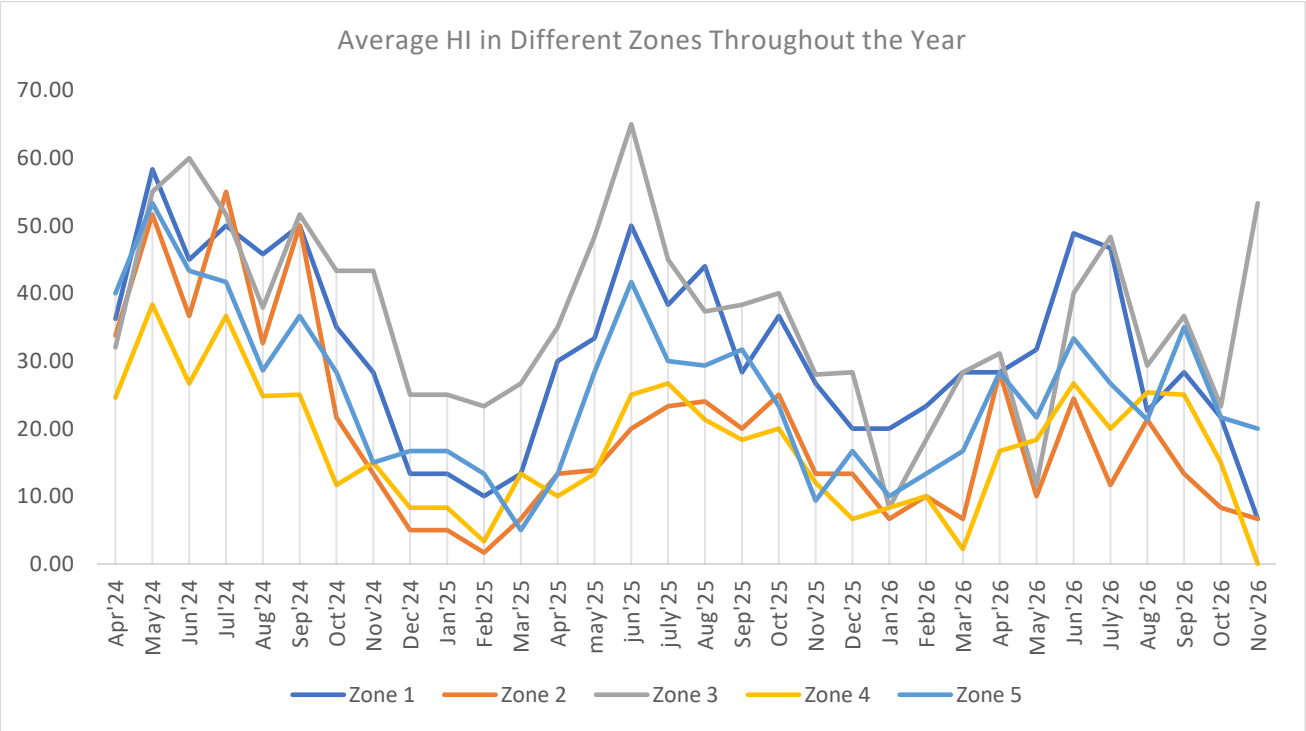


Fig. 10: House Index (HI) in Different Zones from Week 1 to Week 126 (May 2, 2024 – Nov 3, 2026)

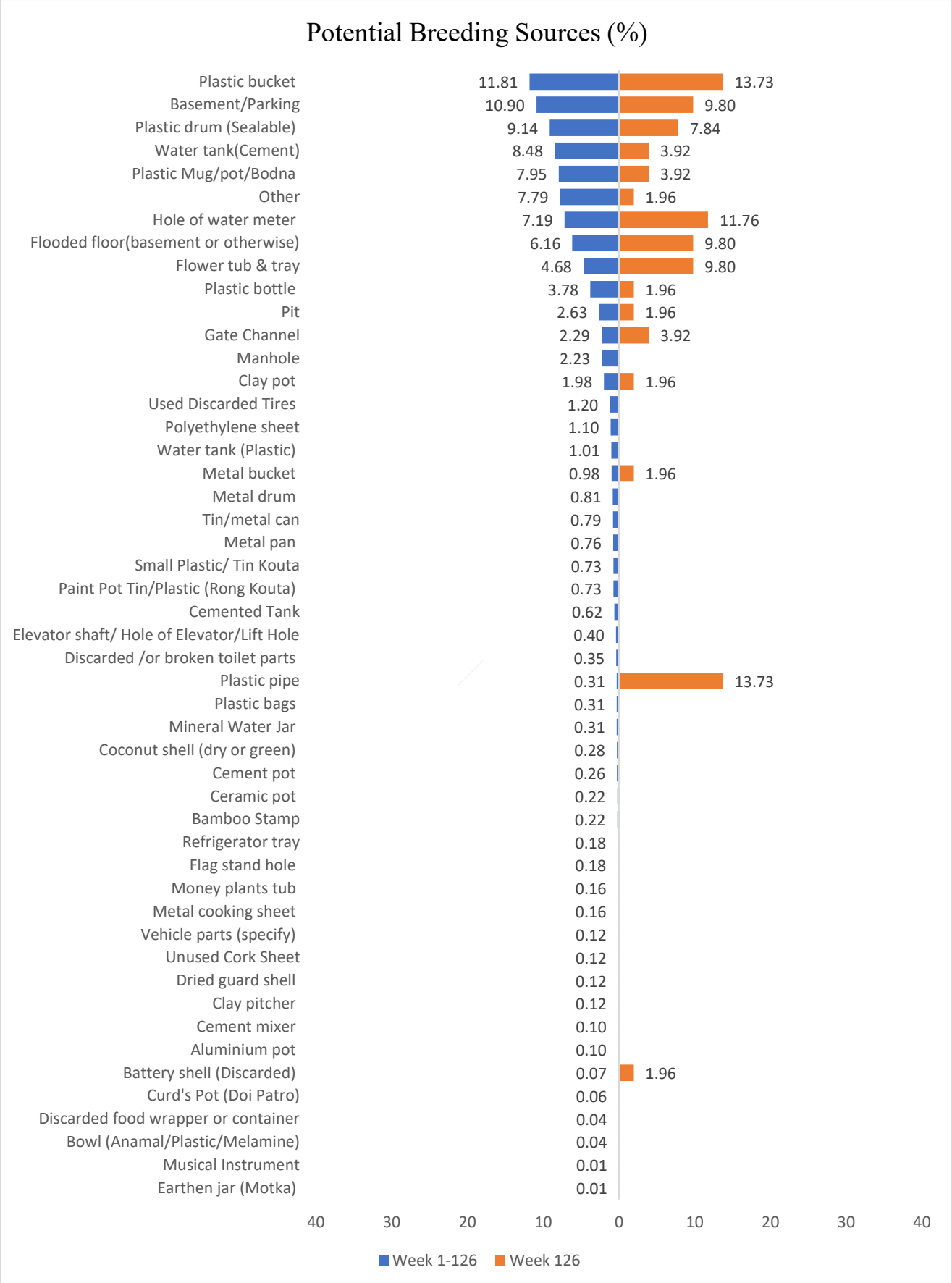


Fig. 11: Container Frequency for *Aedes* mosquitoes in Zones (1-5)

Table 6: Container Productivity of *Aedes* mosquito in DNCC Week 1 to Week 126 (May 2, 2024 – Nov 3, 2026)

Container	Frequency	Total Estimated Aedes Larvae	Percentage of contribution (%)	Relative productivity index	CCPI
Plastic drum (Sealable)	223	41773	22.92	1.00	1.00
Water tank (Cement)	135	22109	12.13	0.53	0.56
Flooded floor (basement or otherwise)	138	17172	9.42	0.41	0.49
Basement/Parking	199	14486	7.95	0.35	0.57
Plastic bucket	211	16875	9.26	0.40	0.62
Plastic bottle	71	8869	4.87	0.21	0.25
Pit	49	7407	4.06	0.18	0.19
Hole of water meter	87	6327	3.47	0.15	0.25
Plastic Mug/pot/Bodna	157	5784	3.17	0.14	0.36
Flower tub & tray	101	4220	2.32	0.10	0.24
Plastic pipe	89	3845	2.11	0.09	0.21
Clay pot	84	3073	1.69	0.07	0.19
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	1.23	0.05	0.06
Other	78	3094	1.70	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	0.75	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	0.02
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 126 (Oct 30-31, Nov 1-3, 2026)

Container	Frequency	Total Aedes Larvae	Percentage of contribution (%)	Relative productivity index	CCPI
Water tank (Cement)	1	254	59.76	1	0.73
Plastic pipe	3	65	15.29	0.26	0.55
Plastic drum (Sealable)	2	57	13.41	0.22	0.40
Flower tub & tray	1	23	5.41	0.09	0.19
Other	1	14	3.29	0.06	0.17
Hole of water meter	1	12	2.82	0.05	0.16

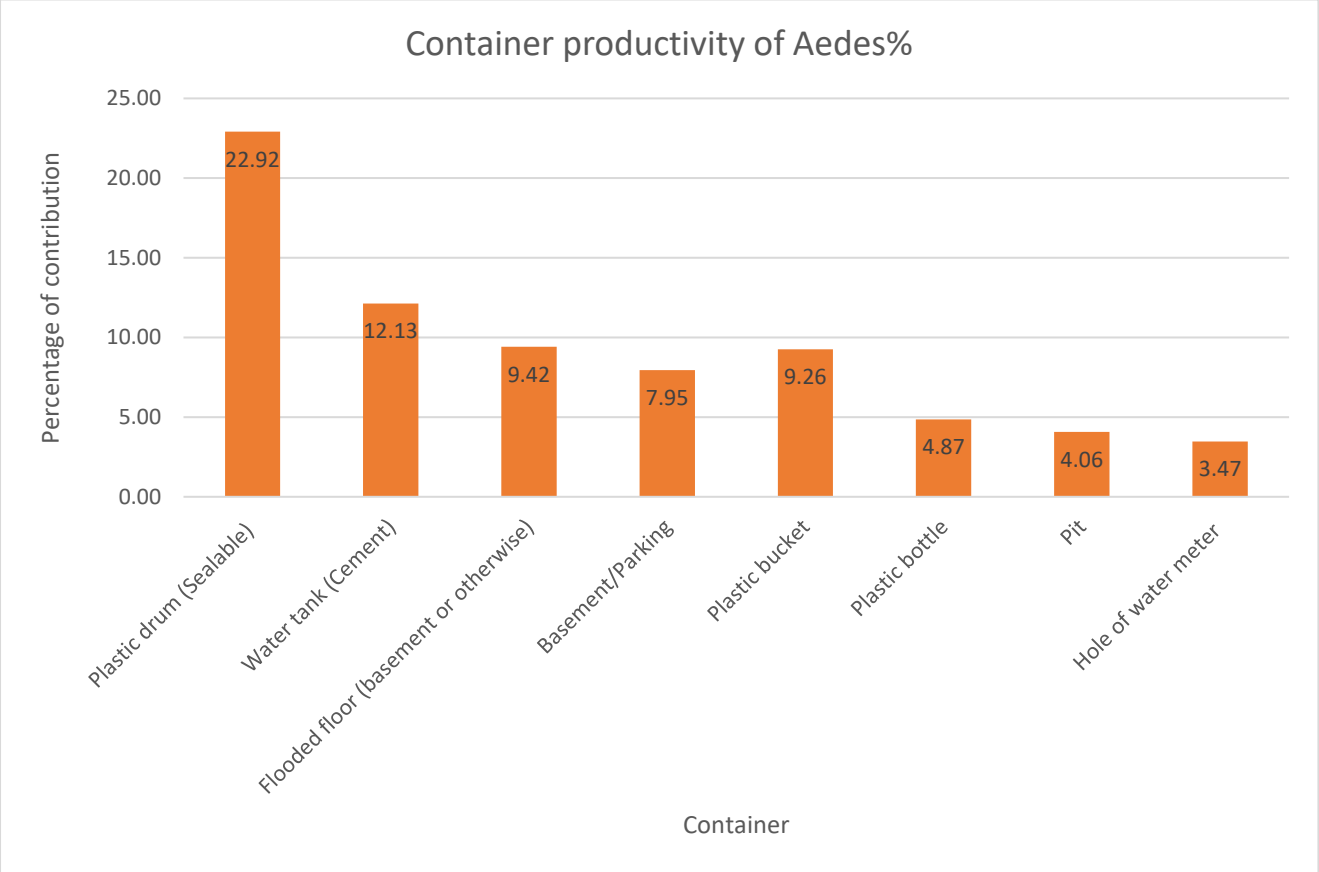


Fig 12: Major container types contributing to Aedes larval production in DNCC in Week 126 (Oct 30-31, Nov 1-3, 2026)

Table 8: Comparison of the Five highest-CCPI Aedes breeding containers across the overall surveillance period (Weeks 1–126) and the current surveillance Week (Week 126)

Week 1-126	Week 126
 Plastic drum (CCPI=1.00)	 Water tank(cement) (CCPI=0.73)
 Plastic bucket (CCPI=0.62)	 Plastic pipe (CCPI=0.55)
 Basement/Parking (CCPI=0.57)	 Plastic drum (CCPI=0.40)
 Water tank(cement) (CCPI=0.56)	 Flower tub & tray (CCPI=0.19)

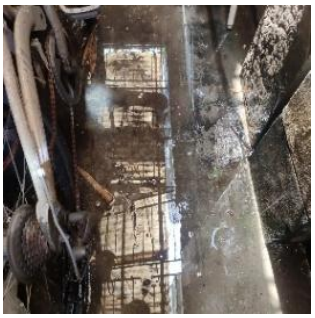
 Flooded floor (CCPI=0.49)	 Other (CCPI=0.17)

Table 9: Container Frequency & Probable potential Wet Container in zones (1-5) from Week 1 to Week 126 (May 2, 2024 – Nov 3, 2026)

Sources	+House	-WC	+WC	Total WC	% WC	% PWC
Plastic bucket	273	287	518	805	7.60	11.81
Basement/Parking	259	69	674	743	9.89	10.90
Plastic drum (Sealable)	283	83	540	623	7.92	9.14
Water tank (Cement)	185	257	321	578	4.71	8.48
Plastic Mug/pot/Bodna	224	95	447	542	6.56	7.95
Other	258	138	393	531	5.76	7.79
Hole of water meter	96	31	459	490	6.73	7.19
Flooded floor (basement or otherwise)	155	153	267	420	3.92	6.16
Flower tub & tray	114	32	287	319	4.21	4.68
Plastic bottle	101	64	194	258	2.85	3.78
Pit	83	24	155	179	2.27	2.63
Gate Channel	47	34	122	156	1.79	2.29
Manhole	67	45	107	152	1.57	2.23
Clay pot	98	11	124	135	1.82	1.98
Used Discarded Tires	41	19	63	82	0.92	1.20
Polyethylene sheet	44	3	72	75	1.06	1.10
Water tank (Plastic)	22	28	41	69	0.60	1.01
Metal bucket	32	6	61	67	0.89	0.98
Metal drum	21	8	47	55	0.69	0.81
Tin/metal can	32	0	54	54	0.79	0.79
Metal pan	20	3	49	52	0.72	0.76
Paint Pot Tin/Plastic (Rong Kouta)	32	5	45	50	0.66	0.73
Small Plastic/ Tin Kouta	25	9	41	50	0.60	0.73
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
Mineral Water Jar	7	4	17	21	0.25	0.31
Plastic bags	8	2	19	21	0.28	0.31
Plastic pipe	8	1	20	21	0.29	0.31
Coconut shell (dry or green)	7	0	19	19	0.28	0.28
Cement pot	11	3	15	18	0.22	0.26
Bamboo Stamp	11	0	15	15	0.22	0.22
Ceramic pot	13	0	15	15	0.22	0.22

Flag stand hole	8	1	11	12	0.16	0.18
Refrigerator tray	9	0	12	12	0.18	0.18
Metal cooking sheet	5	0	11	11	0.16	0.16
Money plants tub	8	0	11	11	0.16	0.16
Clay pitcher	6	1	7	8	0.10	0.12
Dried guard shell	5	0	8	8	0.12	0.12
Unused Cork Sheet	6	1	7	8	0.10	0.12
Vehicle parts (specify)	5	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
Battery shell (Discarded)	1	0	5	5	0.07	0.07
Curd's Pot (Doi Patro)	3	0	4	4	0.06	0.06
Bowl (Anamal/Plastic/Melamine)	3	0	3	3	0.04	0.04
Discarded food wrapper or container	1	1	2	3	0.03	0.04
Earthen jar (Motka)	1	0	1	1	0.01	0.01
Musical Instrument	1	0	1	1	0.01	0.01

Table 10: Percentage of breeding sources in different zone from Week 1 to Week 126 (May 2, 2024 – Nov 3, 2026)

Containers	Percentage of Breeding Sources				
	Zone 01	Zone 02	Zone 03	Zone 04	Zone 05
Plastic bucket	2.13	2.13	2.13	2.93	2.49
Basement/Parking	2.77	1.63	2.95	1.06	2.49
Plastic drum (Sealable)	1.26	2.26	1.48	2.17	1.97
Water tank (Cement)	1.07	1.45	1.16	2.44	2.36
Plastic Mug/pot/Bodna	1.58	1.31	1.47	2.11	1.48
Other	2.45	1.38	2.16	0.69	1.11
Hole of water meter	0.85	1.26	0.47	2.20	2.41
Flooded floor (basement or otherwise)	1.51	1.36	1.09	0.81	1.39
Flower tub & tray	1.22	0.69	1.55	0.82	0.40
Plastic bottle	0.56	0.84	0.56	1.00	0.84
Pit	0.65	0.37	0.91	0.34	0.37
Gate Channel	0.92	0.22	0.57	0.06	0.51
Manhole	0.76	0.22	0.82	0.21	0.22
Clay pot	0.26	0.37	0.54	0.37	0.44
Used Discarded Tires	0.38	0.34	0.19	0.16	0.13
Polyethylene sheet	0.31	0.26	0.22	0.23	0.07
Water tank (Plastic)	0.00	0.60	0.15	0.13	0.13
Metal bucket	0.16	0.12	0.28	0.25	0.18
Metal drum	0.19	0.13	0.16	0.22	0.10
Tin/metal can	0.23	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	0.09	0.07	0.04	0.01	0.09
Coconut shell (dry or green)	0.04	0.06	0.07	0.03	0.07
Bamboo Stamp	0.04	0.01	0.09	0.01	0.10

Ceramic pot	0.06	0.07	0.03	0.06	0.00
Refrigerator tray	0.06	0.01	0.04	0.01	0.09
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)	0.03	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

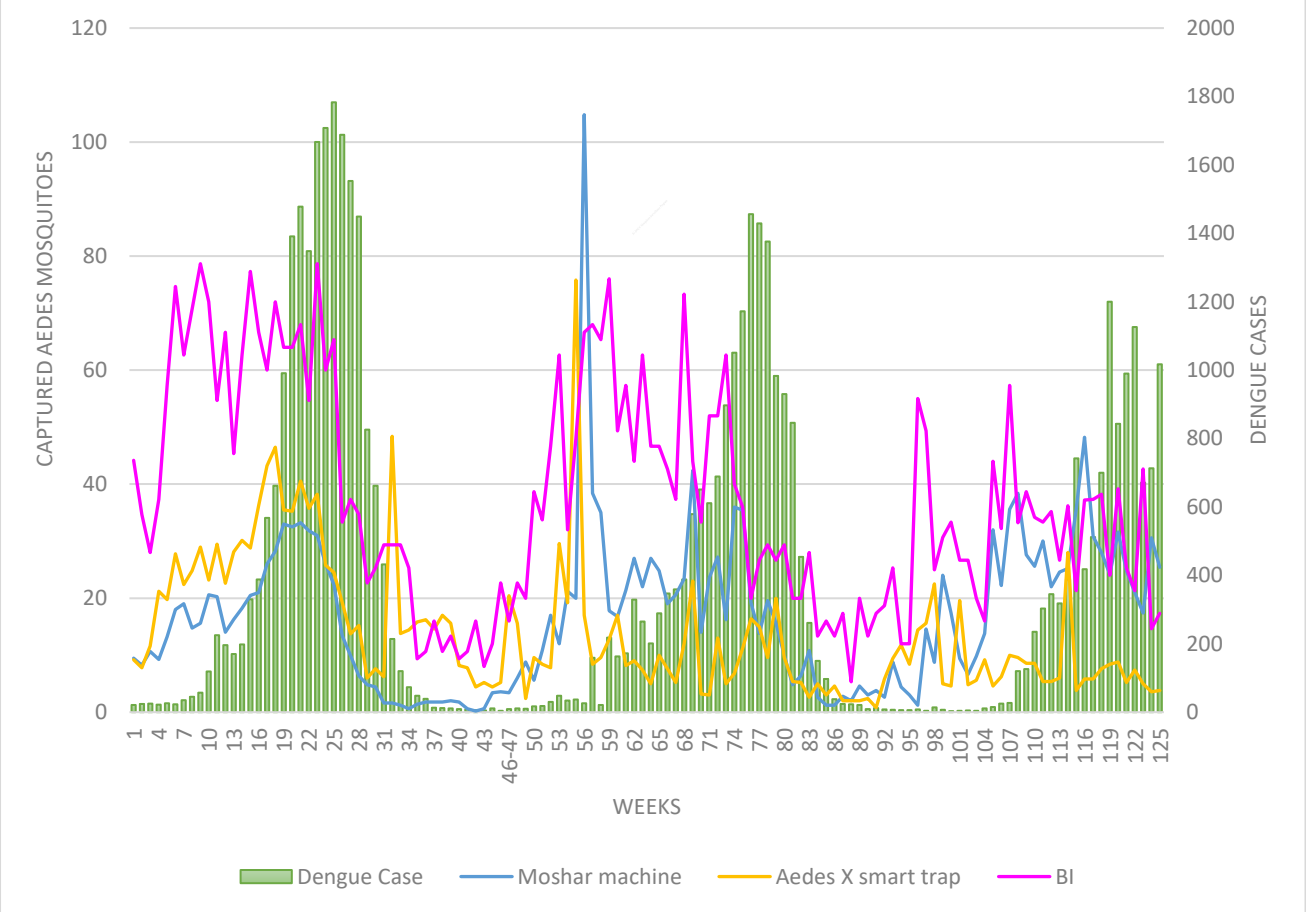


Fig. 13: Correlation between Dengue Cases and *Aedes* Mosquitoes Captured by per Moshar Machine CO_2 traps, Aedes X smart traps

NB: DNCC dengue cases only

Note: This week dengue cases data could not be collected due to server issues.

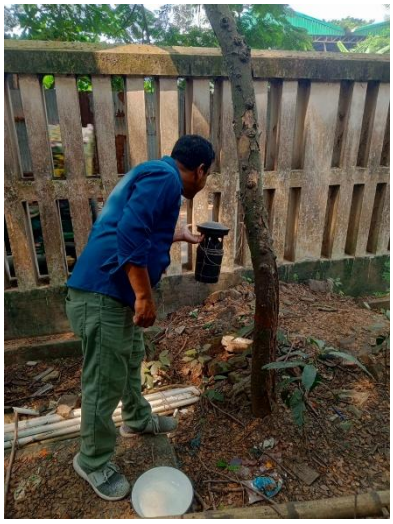
Photographs of Mosquitoes Surveillance











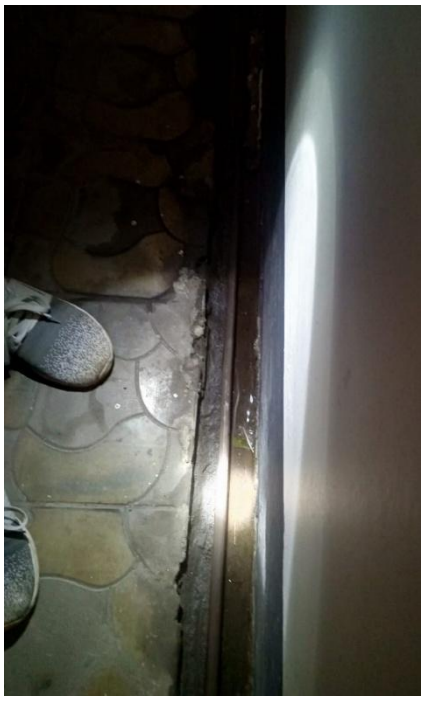








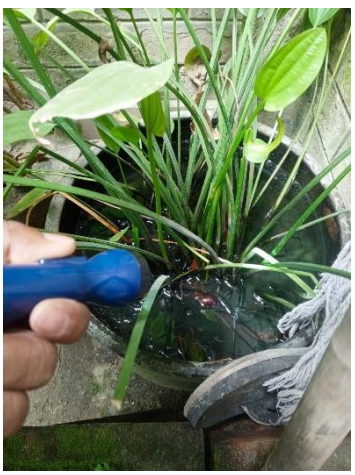
Samples Collection from Field









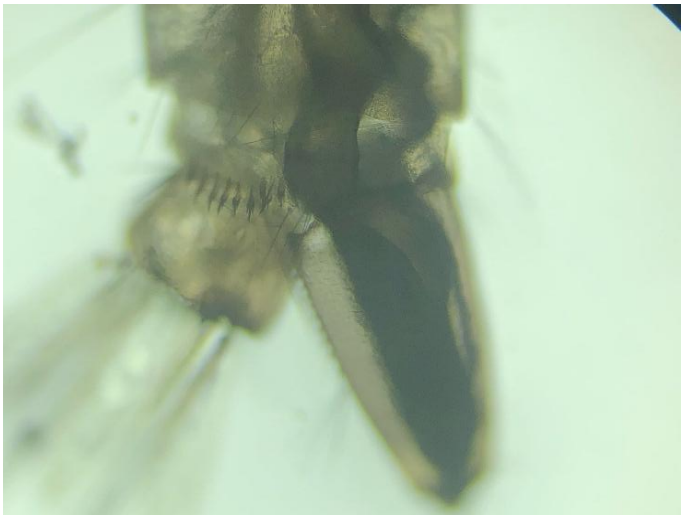


Samples Processing and Identification















Comments:
The mosquito density is increased and the dengue cases increasing rapidly. The Breteau Index (BI) is decreased in week 126. 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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