Weekly Report on

JU-DNCC Mosquitoes Surveillance Program

Week 113 (July 31, Aug 01-04, 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.

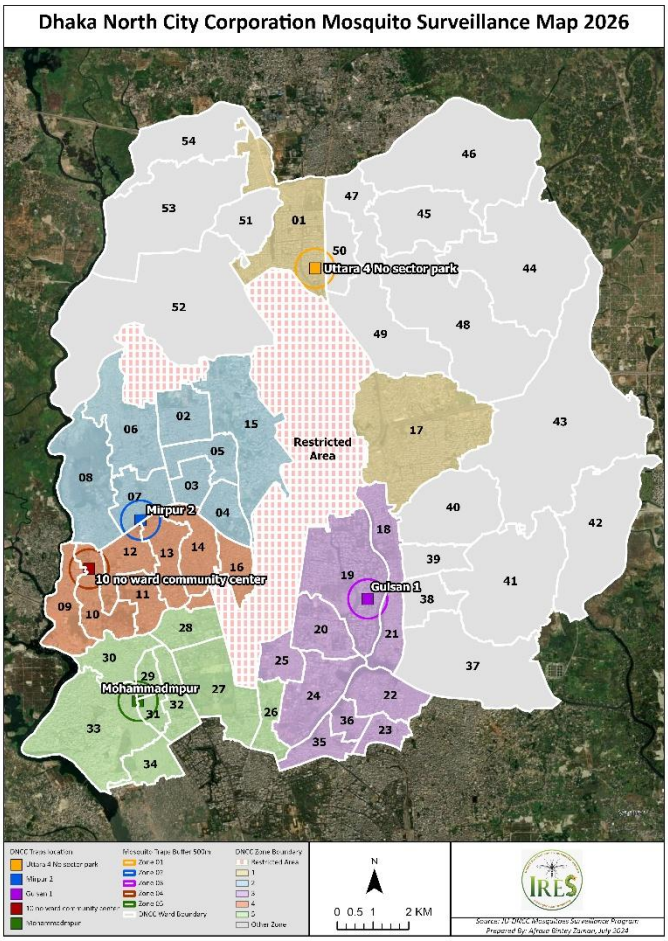
Zone	Traps Location	GPS Location
01	Uttara-4 No sector park	23.8613672,90.4035528
02	Mirpur-2, Vander office, DNCC	23.8036248,90.3601995
03	Gulsan 1, Purantan Vander office	23.7860557,90.4164024
04	10 No ward community center, Mirpur-1	23.7922967,90.3467992
05	Mohammadpur regional office of DNCC	23.7618721,90.3590884

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 113 (July 31, Aug 01-04, 2026)

Zone	*Ae. aegypti*	*Ae. albopictus*	*Cx. quinquefasciatus*	*Cx. tritaeniorhynchus*	*Ar. subalbatus*	*Mn. uniformis*	*An. subpictus*	Total	%
1	19	4	2487	452	57	1	1	3021	27.18
2	7	2	186	38	14	0	1	248	2.23
3	18	3	1165	362	32	0	0	1580	14.22
4	32	4	3265	265	114	0	0	3680	33.11
5	29	5	2289	245	16	0	0	2584	23.25
Total	105	18	9392	1362	233	1	2	11113	100.00
%	0.94	0.16	84.51	12.26	2.10	0.01	0.02	100.00	

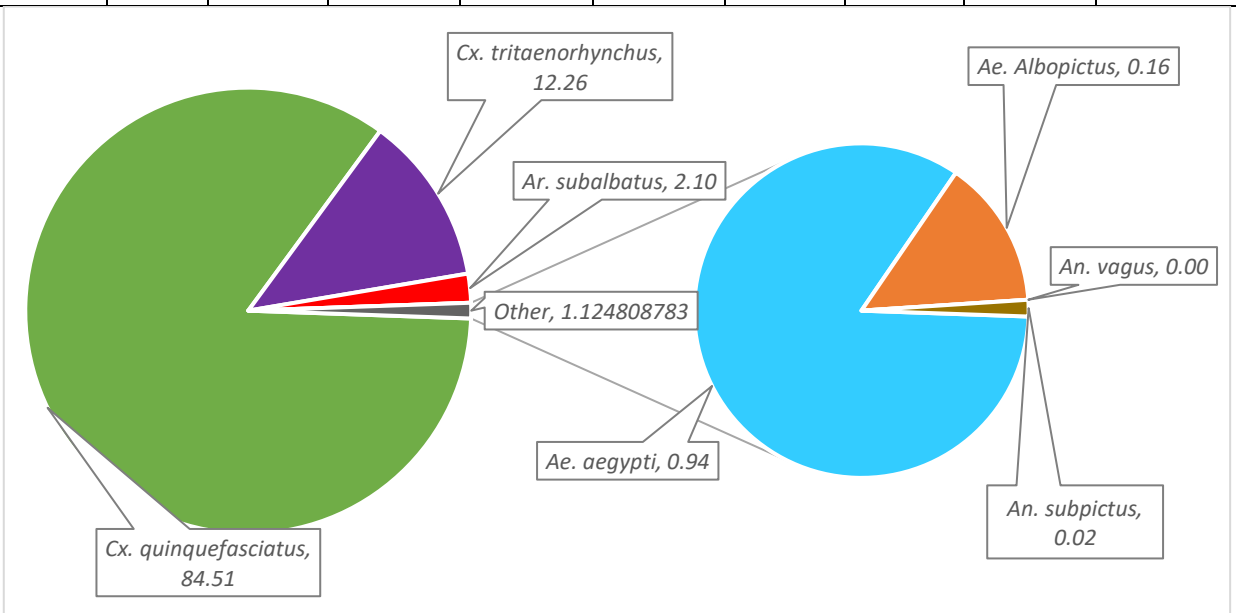


Fig. 1: Percentage of Adult Mosquitoes Collected by Moshar Machine (CO_2) traps in week 113 (July 31, Aug 01-04, 2026)

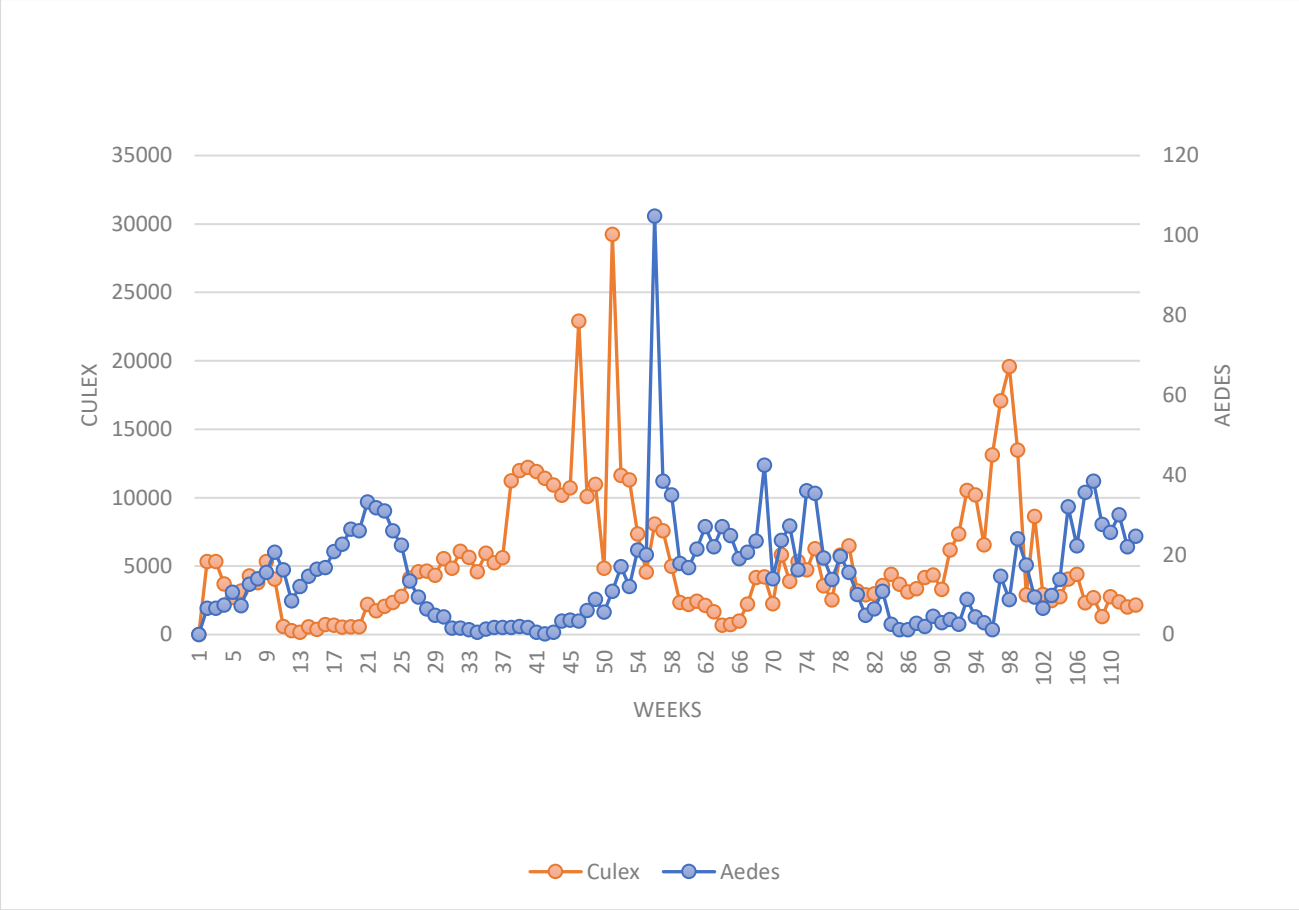


Fig 2: Average number of mosquitoes per Moshar Machine (CO_2) traps from Week 1 to Week 113 (May 2, 2024 – Aug 04, 2026)

Table 2. Collected Mosquito Larvae from *Aedes* X smart Traps in week 113 (July 31, Aug 01-04, 2026)

Zone	N	*Ae. aegypti*	*Ae. albopictus*
1	0	0	0
2	12	12	0
3	10	0	10
4	8	0	8
5	0	0	0
Total	30	12	18
(%)	100	40	60

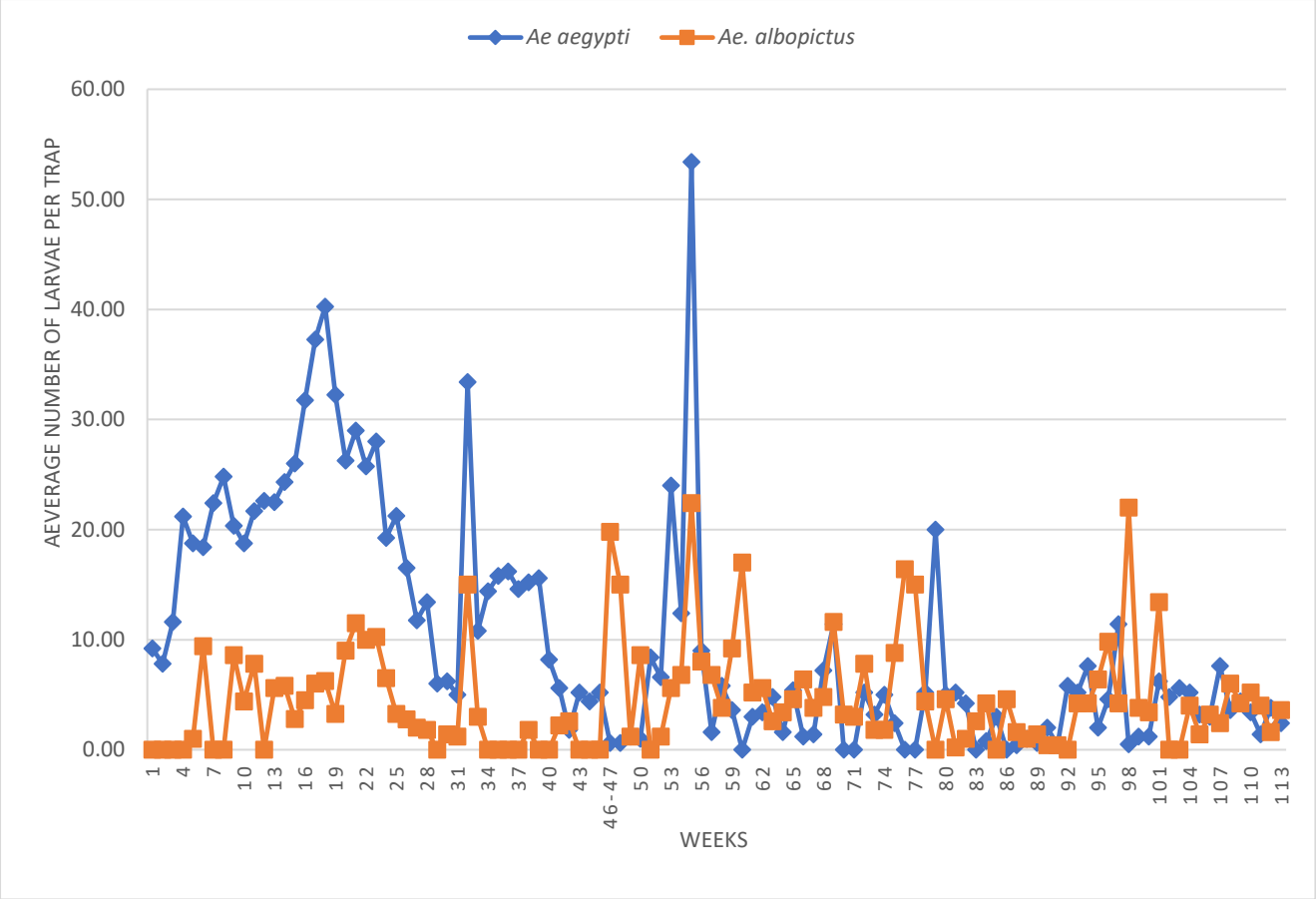


Fig 3: Average Number of *Aedes* Larvae per *Aedes* X Smart Trap in Zones 1-5 from Week 1 to Week 113 (May 2, 2024 – Aug 04, 2026)

Table 3. Collected Adult Mosquitoes from Gravid Trap in Week 113 (July 31, Aug 01-04, 2026)

Zone	Number of Mosquitoes	*Ae. aegypti*	*Ae. albopictus*	*Cx. quinquefasciatus*
1	1	1	0	0
2	1	0	1	0
3	2	2	0	0
4	4	0	1	3
5	1	0	0	1
Total	9	3	2	4
(%)	100.00	33.33	22.22	44.44

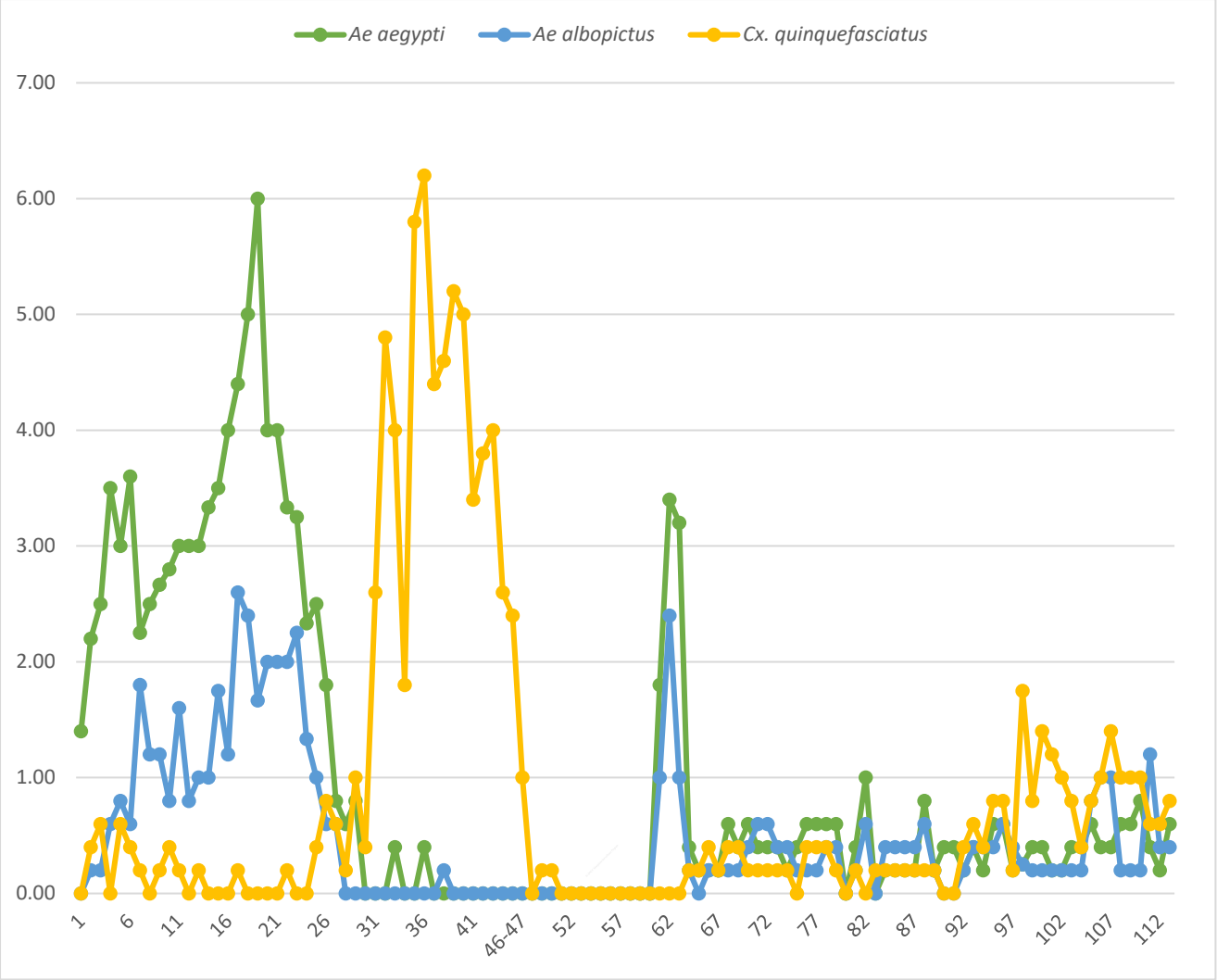


Fig 4: Average number of adult mosquitoes per Gravid trap in zones 1-5 from Week 1 to Week 113 (May 2, 2024 – Aug 04, 2026)

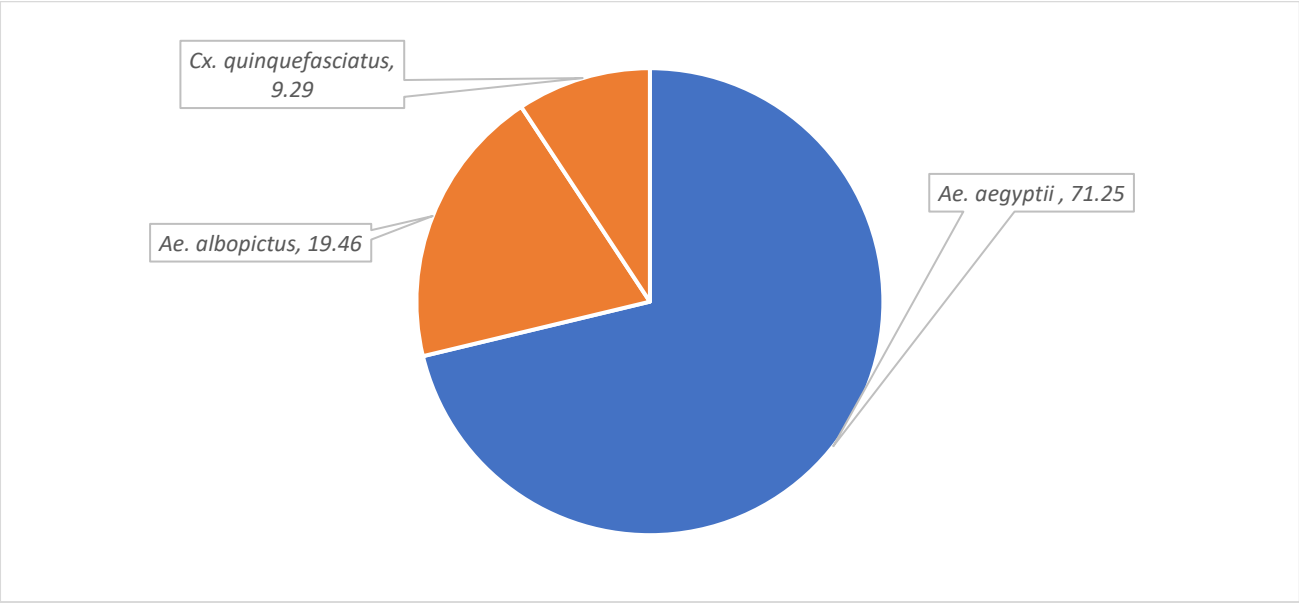


Fig. 5: Percentage of Mosquito Larvae from Zones (1-5) in week 113 (July 31, Aug 01-04, 2026)

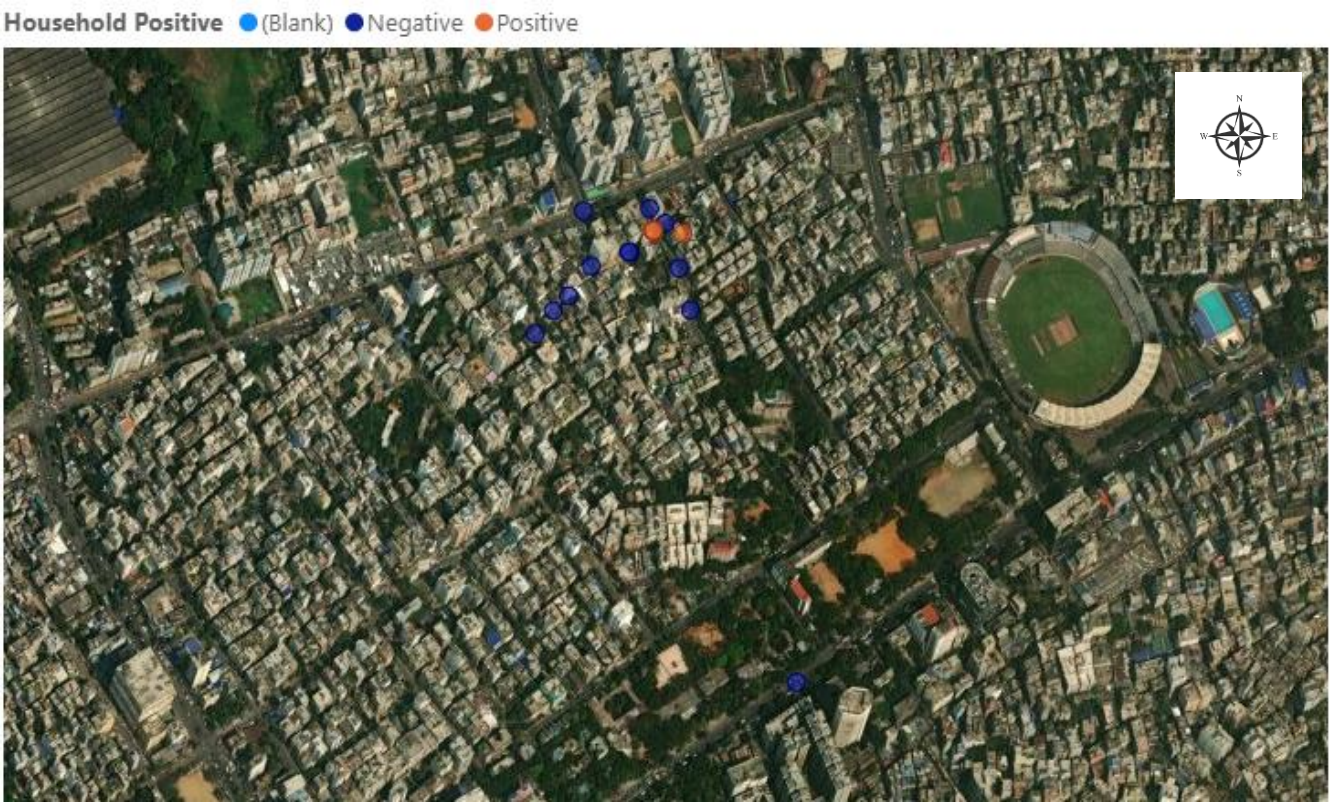
Table 4. Positive Larval Spots in Different Zones (1-5) with Estimated Number of Larvae in week 113 (July 31, Aug 01-04, 2026)

Zone	GPS Location	*Ae. aegypti*	*Ae. albopictus*	*Cx. quinquefasciatus*	*Source*
1	23.7634175 90.3573807	0	53	0	Flower tub & tray
	23.860634 90.4050107	23	0	0	Plastic bucket
	23.8606084 90.4054956	21	0	0	Plastic bottle
	Total	44	53	0	
2	23.8079772 90.359082	6	0	0	Plastic bucket
	23.8080101 90.3587383	12	0	0	Plastic bottle
	23.8079971 90.3587358	32	0	0	Flower tub & tray
	Total	50	0	0	
3	23.7884675 90.4171207	23	0	0	Basement/Parking
	23.7885703 90.4172792	8	0	0	Plastic Mug/pot/Bodna
	23.7891638 90.4170703	0	0	52	Flower tub & tray
	23.788698 90.4175517	23	0	0	Other
	23.7889357 90.4182619	0	56	0	Flooded floor (basement or otherwise)
	Total	54	56	52	
4	23.7889701 90.3457331	25	0	0	Plastic bucket
	23.7898527 90.3450184	124	0	0	Plastic drum (Sealable)
	Total	149	0	0	

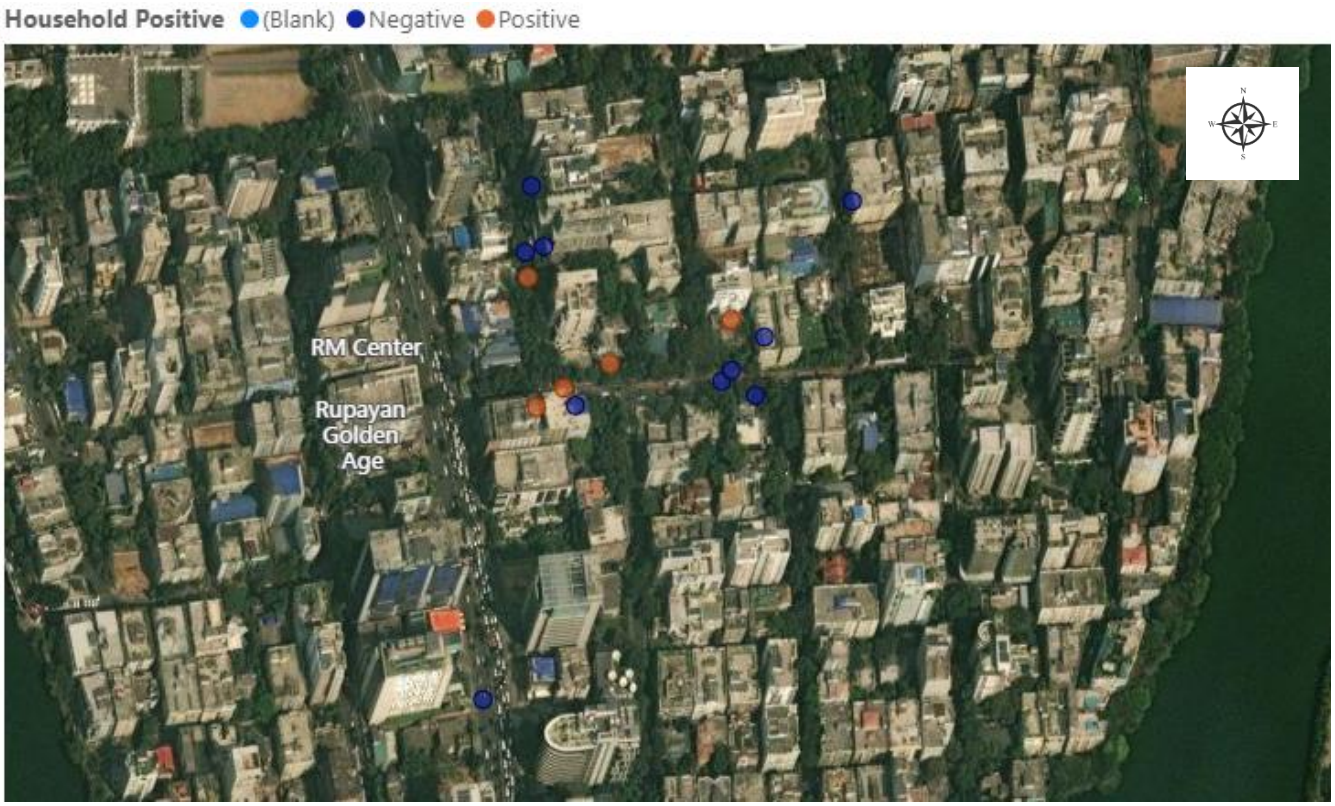
5	23.7627317 90.3578232	3	0	0	Manhole
	23.7631045 90.357531	53	0	0	Flooded floor (basement or otherwise)
	23.7632446 90.3574778	23	0	0	Other
	23.7634175 90.3573807	23	0	0	Plastic Mug/pot/Bodna
	Total	102	0	0	
Grand Total		399	109	52	



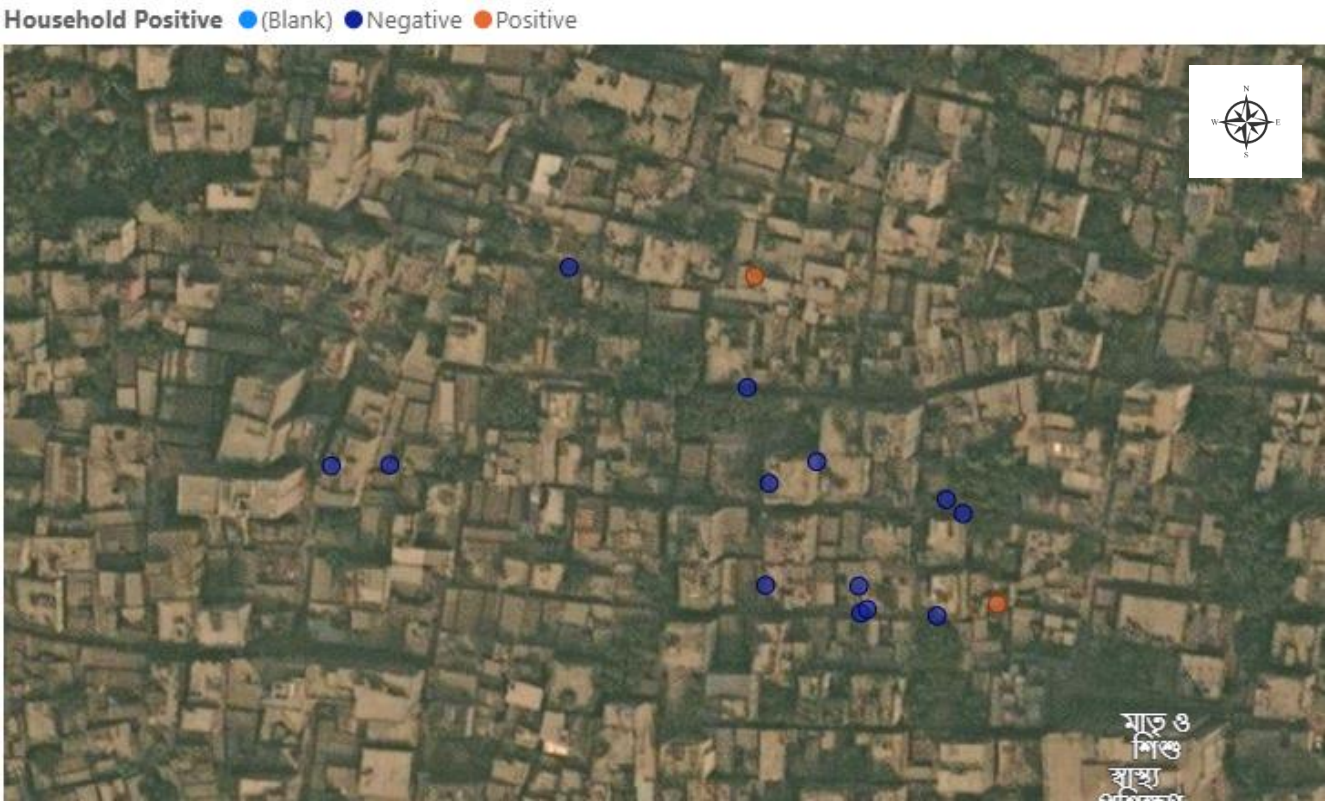
Map 1: Positive and Negative House of Uttara 4 No. Sector at Weeks 113



Map 2: Positive and Negative House of Mirpur 2 at Weeks 113



Map 3: Positive and Negative House of Gulshan 1 at Weeks 113



Map 4: Positive and Negative House of Mirpur 1 at Weeks 113



Map 5: Positive and Negative House of Mohammadpur at Weeks 113

Table 5: Positive House, Wet Container, BI, CI and HI in Zones (1-5) in week 113 (July 31, Aug 01-04, 2026)

Zone	Total House	Positive House	Total Wet container	Positive Wet Container	BI	CI	HI
1	15	3	41	3	20.00	7.32	20.00
2	15	3	25	3	20.00	12.00	20.00
3	15	6	54	8	53.33	14.81	40.00
4	15	2	27	2	13.33	7.41	13.33
5	15	4	57	4	26.67	7.02	26.67

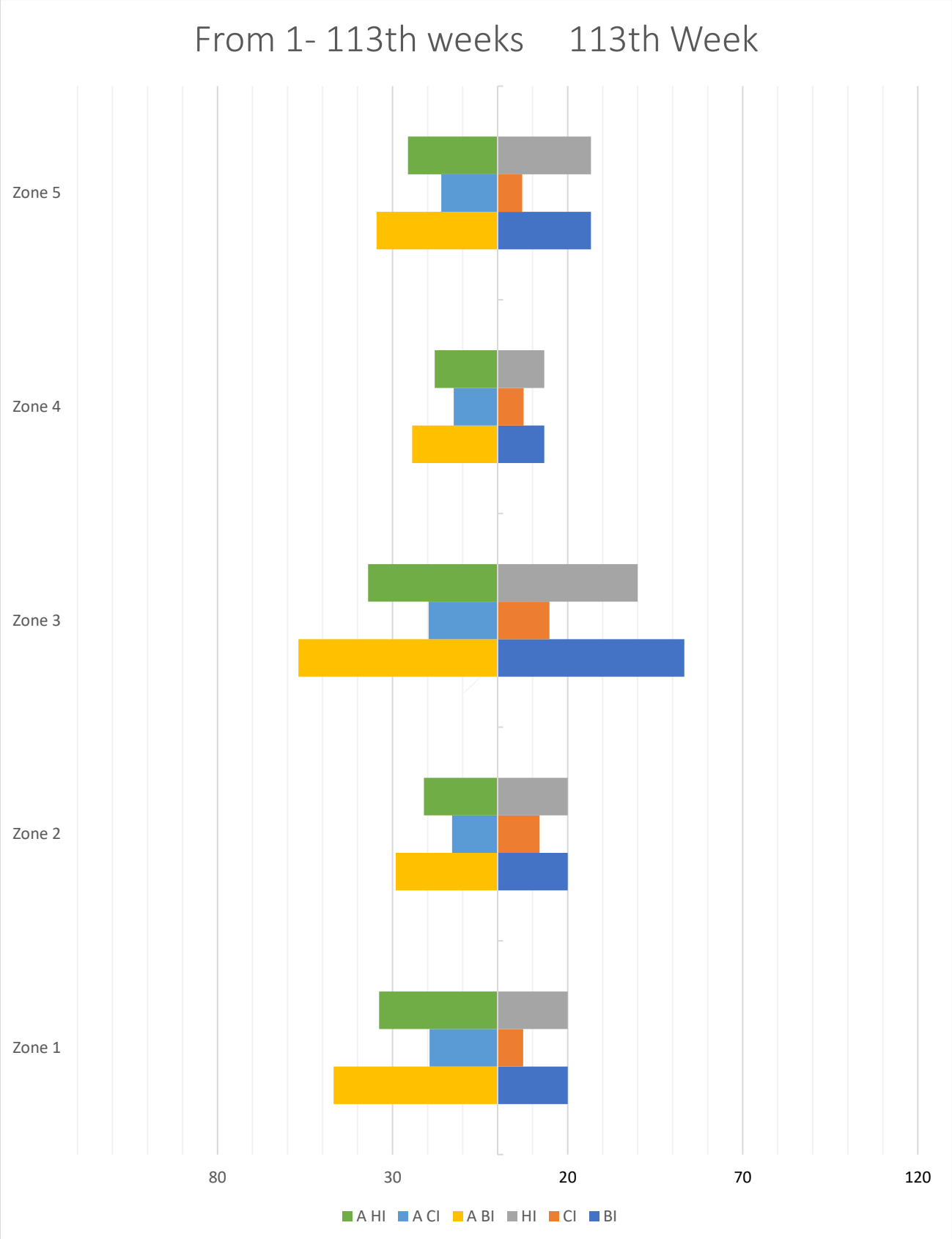


Fig. 6: BI, CI and HI in Different Zones (1-5) of Dhaka north City Corporation

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

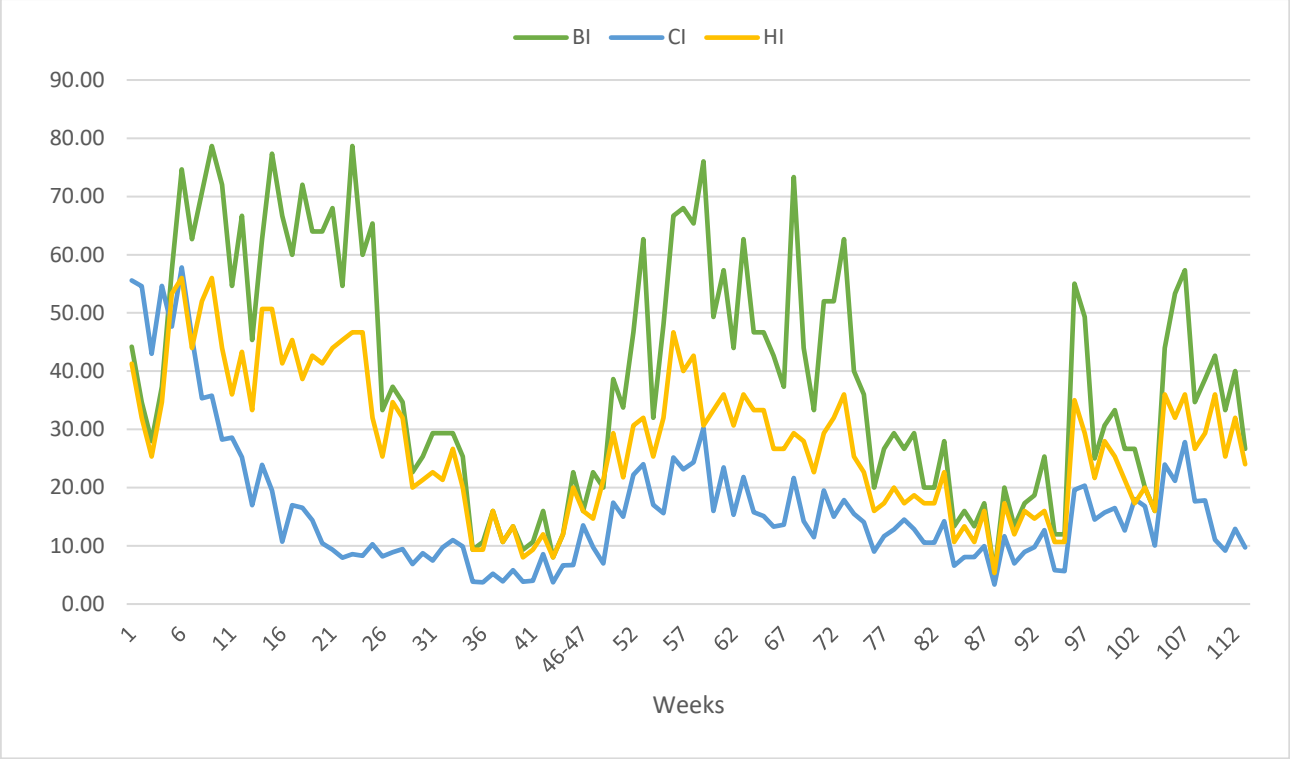


Fig 7: Mosquitoes population fluctuation (BI, CI, HI) from Week 1 to Week 113 (May 2, 2024 – Aug 04, 2026)

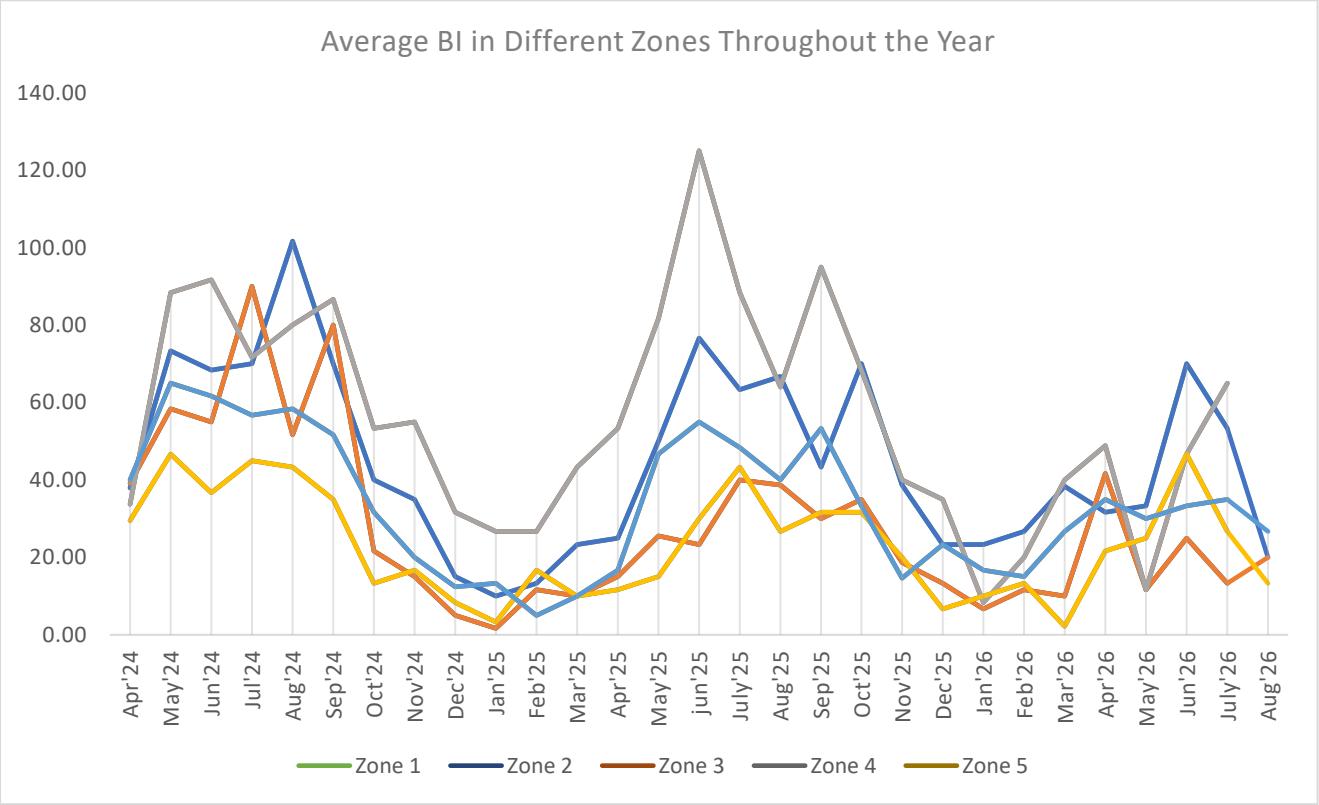


Fig. 8: Breteau Index (BI) in Different Zones from Week 1 to Week 113 (May 2, 2024 – Aug 04, 2026)

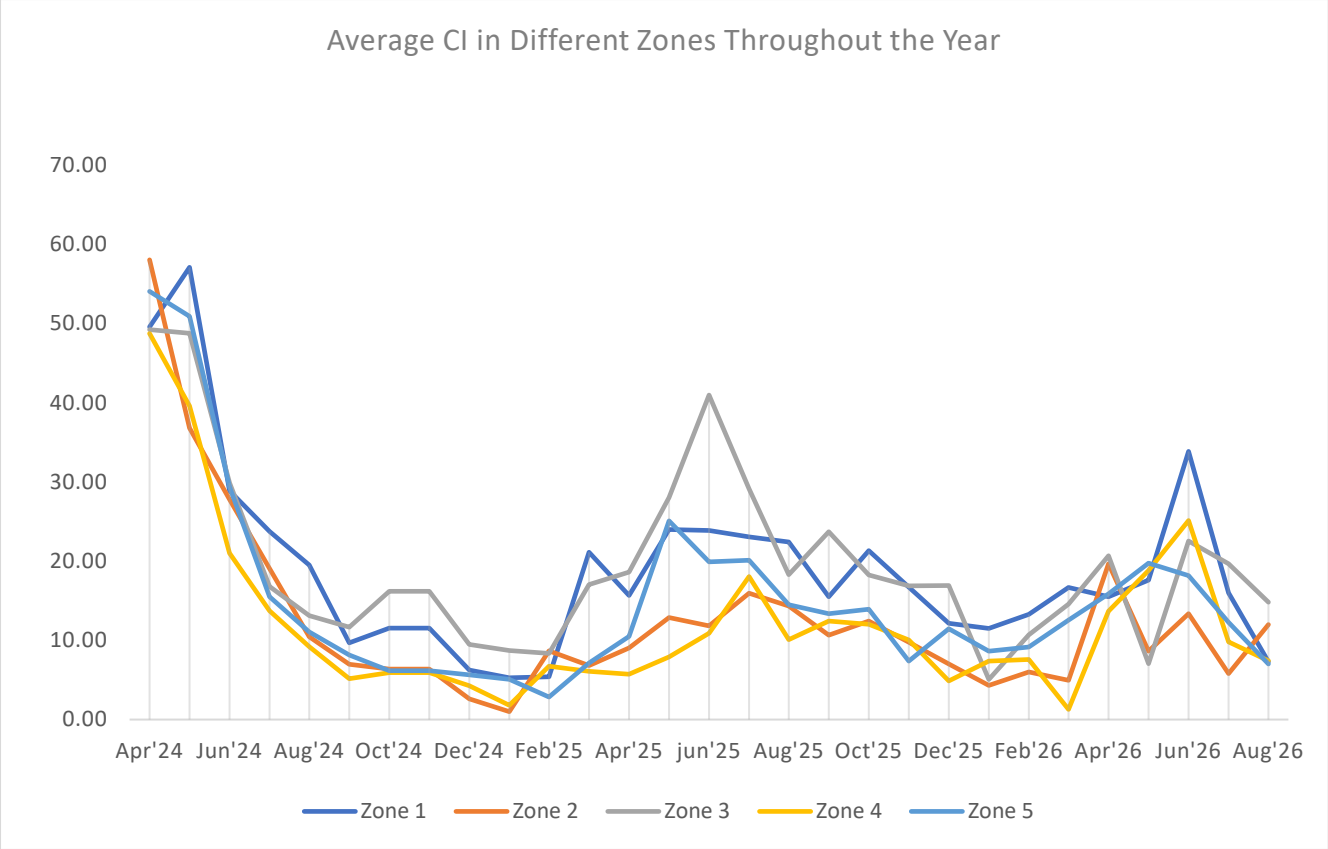


Fig. 9: Container Index (CI) in Different Zones from Week 1 to Week 113 (May 2, 2024 – Aug 04, 2026)

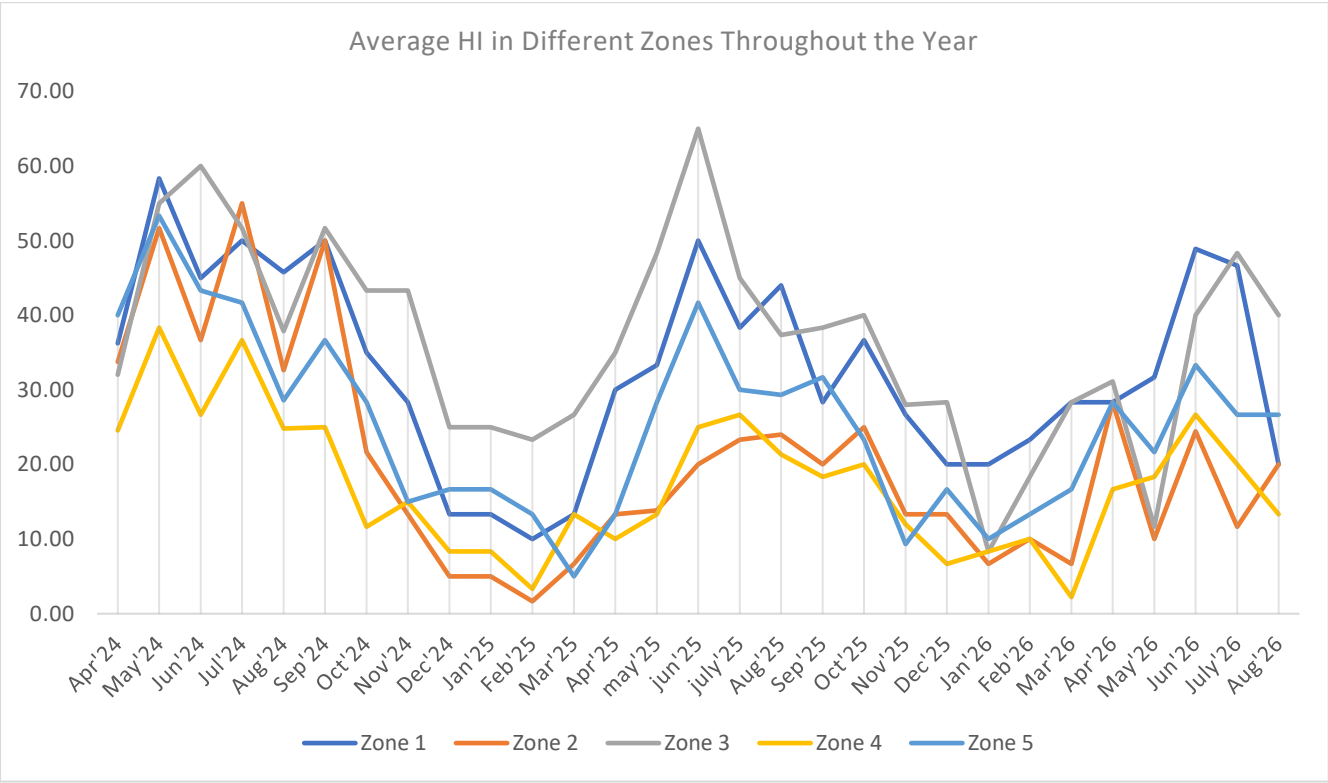


Fig. 10: House Index (HI) in Different Zones from Week 1 to Week 113 (May 2, 2024 – Aug 04, 2026)

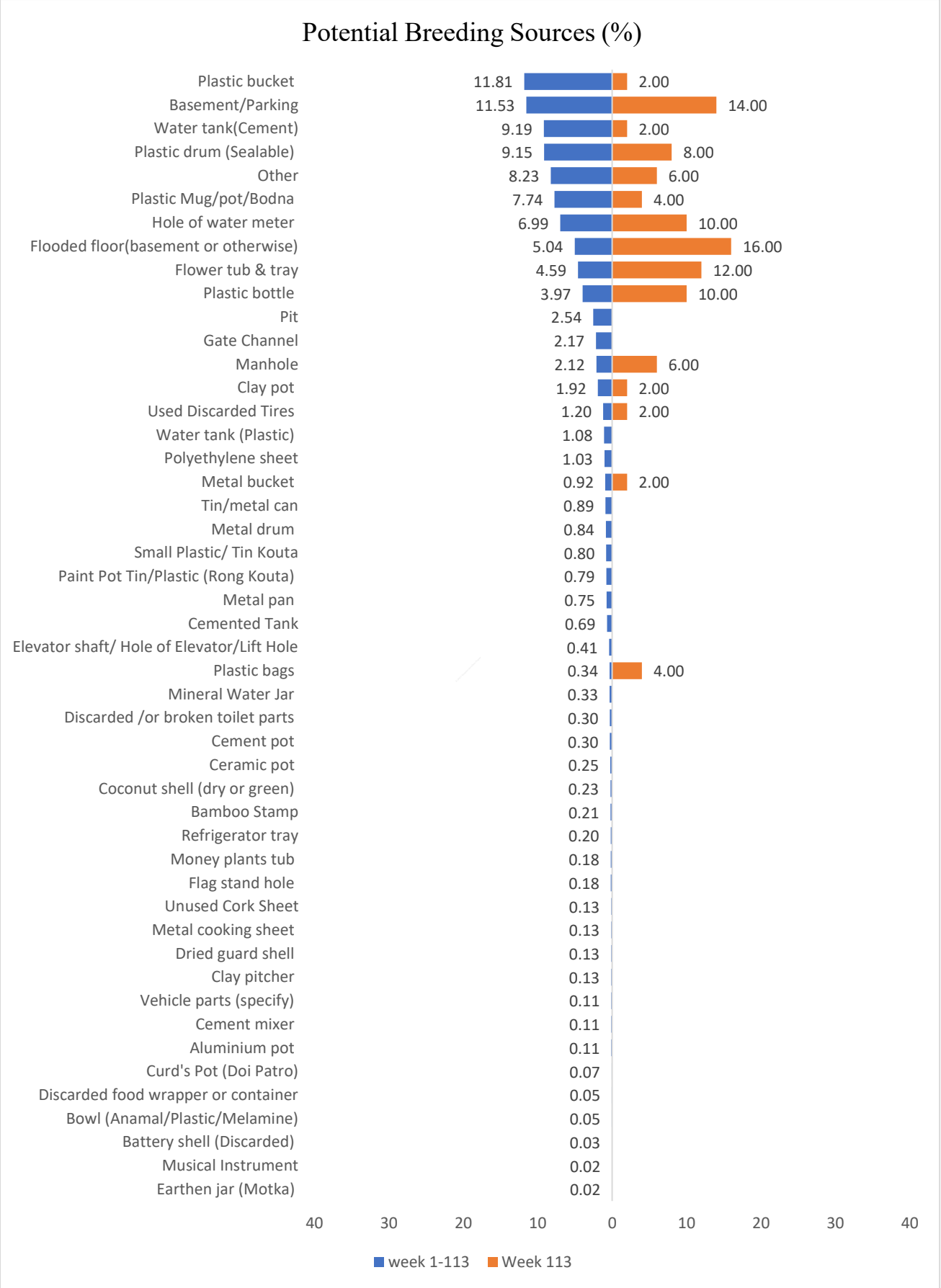


Fig. 11: Container Frequency for *Aedes* mosquitoes in Zones (1-5)

Table 6: Container Productivity of *Aedes* mosquito in DNCC from Week 1 to Week 113 (May 2, 2024 – Aug 04, 2026)

Container	Frequency	Total Estimated Aedes Larvae	Percentage of contribution (%)	Relative productivity index	CCPI
Plastic drum (Sealable)	201	41208	24.54	1.00	1.00
Water tank (Cement)	127	18625	11.09	0.45	0.52
Flooded floor (basement or otherwise)	118	16788	10.00	0.41	0.48
Basement/Parking	193	13849	8.25	0.34	0.59
Plastic bucket	187	12313	7.33	0.30	0.55
Plastic bottle	63	8603	5.12	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	135	5147	3.06	0.12	0.34
Flower tub & tray	94	4033	2.40	0.10	0.25
Plastic pipe	80	3668	2.18	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	1.34	0.05	0.06
Other	64	2019	1.20	0.05	0.16
Water tank (Plastic)	17	1919	1.14	0.05	0.06
Manhole	40	1767	1.05	0.04	0.11
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	0.87	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/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

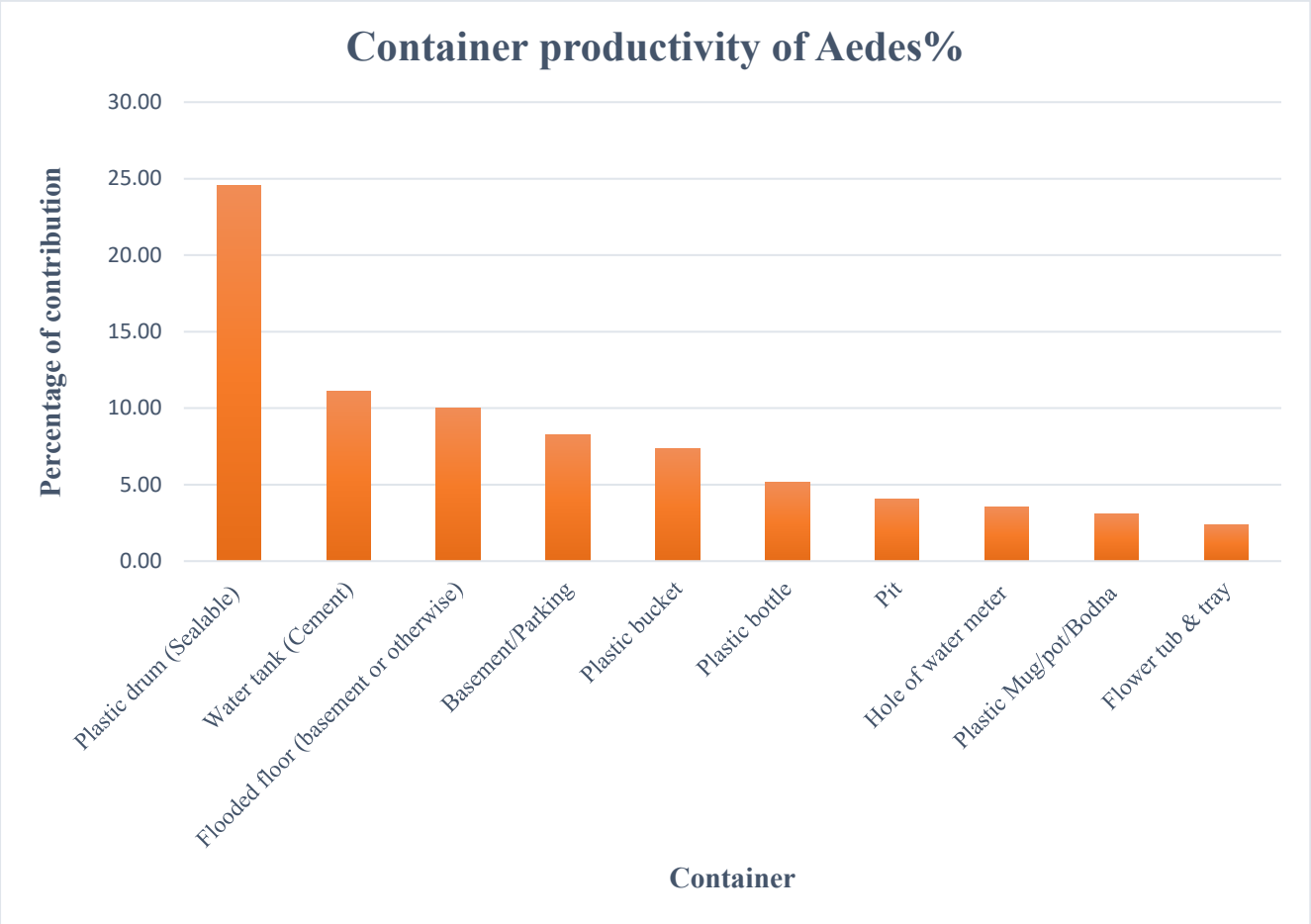


Fig 12: Major container types contributing to Aedes larval production in DNCC from Week 1 to Week 113 (May 2, 2024 – Aug 04, 2026)

Table 7: Container Productivity of *Aedes* mosquito in DNCC in Week 113 (July 31, Aug 01-04 2026)

Container	Frequency	Total Aedes Larvae	Percentage of contribution (%)	Relative productivity index	CCPI
Plastic drum (Sealable)	1	124	24.41	1.00	0.73
Flooded floor (basement or otherwise)	2	109	21.46	0.88	0.79
Flower tub & tray	3	85	16.73	0.69	0.81
Plastic bucket	2	54	10.63	0.44	0.53
Other	2	46	9.06	0.37	0.49
Plastic bottle	2	33	6.50	0.27	0.43
Plastic Mug/pot/Bodna	2	31	6.10	0.25	0.42
Basement/Parking	1	23	4.53	0.19	0.24
Manhole	1	3	0.59	0.02	0.15
Plastic drum (Sealable)	1	124	24.41	1.00	0.73

Table 8: Comparison of the Five highest-CCPI Aedes breeding containers across the overall surveillance period (Weeks 1–113) and the current surveillance Week (Week 113)

Week 1-113	Week 113
 Plastic drum (CCPI=1.00)	 Flower tub & tray (CCPI=0.81)
 Basement/Parking (CCPI=0.59)	 Flooded floor (CCPI=0.79)
 Plastic bucket (CCPI=0.55)	 Plastic drum (CCPI=0.73)
 Water tank(cement) (CCPI=0.52)	 Plastic bucket (CCPI=0.53)

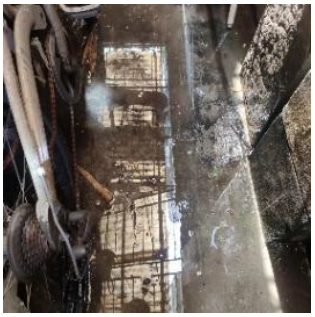
 Flooded floor (CCPI=0.48)	 Other (CCPI=0.49)

Table 9: Container Frequency & Probable potential Wet Container in zones (1-5) from Week 1 to Week 113 (May 2, 2024 – Aug 04, 2026)

Sources	+House	-WC	+WC	**Total WC**	% WC	% PWC
Plastic bucket	246	287	433	720	11.81	7.10
Basement/Parking	252	67	636	703	11.53	10.43
Water tank (Cement)	176	256	304	560	9.19	4.99
Plastic drum (Sealable)	259	83	475	558	9.15	7.79
Other	241	138	364	502	8.23	5.97
Plastic Mug/pot/Bodna	198	95	377	472	7.74	6.18
Hole of water meter	84	30	396	426	6.99	6.50
Flooded floor (basement or otherwise)	137	153	154	307	5.04	2.53
Flower tub & tray	107	32	248	280	4.59	4.07
Plastic bottle	94	64	178	242	3.97	2.92
Pit	75	23	132	155	2.54	2.17
Gate Channel	42	34	98	132	2.17	1.61
Manhole	62	44	85	129	2.12	1.39
Clay pot	93	11	106	117	1.92	1.74
Used Discarded Tires	38	19	54	73	1.20	0.89
Water tank (Plastic)	21	28	38	66	1.08	0.62
Polyethylene sheet	40	3	60	63	1.03	0.98
Metal bucket	27	6	50	56	0.92	0.82
Tin/metal can	32	0	54	54	0.89	0.89
Metal drum	20	8	43	51	0.84	0.71
Small Plastic/ Tin Kouta	24	9	40	49	0.80	0.66
Paint Pot Tin/Plastic (Rong Kouta)	30	5	43	48	0.79	0.71
Metal pan	18	3	43	46	0.75	0.71
Cemented Tank	22	13	29	42	0.69	0.48
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	0.33	0.26
Cement pot	11	3	15	18	0.30	0.25
Discarded /or broken toilet parts	12	3	15	18	0.30	0.25
Ceramic pot	13	0	15	15	0.25	0.25
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	0.20	0.20
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	0.07	0.07
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 113 (May 2, 2024 – Aug 04, 2026)

Containers	Percentage of Breeding Sources				
	Zone 01	Zone 02	Zone 03	Zone 04	Zone 05
Plastic bucket	2.10	2.12	2.17	2.99	2.44
Basement/Parking	2.94	1.67	3.07	1.18	2.67
Water tank (Cement)	1.20	1.54	1.18	2.64	2.62
Plastic drum (Sealable)	1.28	2.26	1.53	2.13	1.95
Other	2.66	1.46	2.25	0.69	1.18
Plastic Mug/pot/Bodna	1.43	1.28	1.51	2.13	1.39
Hole of water meter	0.80	1.26	0.44	2.17	2.31
Flooded floor (basement or otherwise)	1.25	1.18	0.80	0.59	1.21
Flower tub & tray	1.26	0.62	1.59	0.77	0.34
Plastic bottle	0.54	0.94	0.57	1.05	0.87
Pit	0.64	0.36	0.85	0.31	0.38
Gate Channel	0.87	0.20	0.57	0.07	0.46
Manhole	0.74	0.21	0.71	0.23	0.23
Clay pot	0.30	0.34	0.54	0.28	0.46
Used Discarded Tires	0.39	0.34	0.18	0.13	0.15
Water tank (Plastic)	0.00	0.67	0.15	0.13	0.13
Polyethylene sheet	0.28	0.26	0.21	0.20	0.08
Metal bucket	0.16	0.10	0.25	0.25	0.16
Tin/metal can	0.26	0.23	0.18	0.16	0.05
Metal drum	0.16	0.13	0.18	0.25	0.11
Small Plastic/ Tin Kouta	0.21	0.15	0.23	0.10	0.11
Paint Pot Tin/Plastic (Rong Kouta)	0.18	0.08	0.23	0.18	0.11
Metal pan	0.15	0.16	0.23	0.08	0.13
Cemented Tank	0.13	0.10	0.16	0.20	0.10
Elevator shaft/ Hole of Elevator/Lift Hole	0.18	0.10	0.07	0.00	0.07
Mineral Water Jar	0.03	0.02	0.07	0.15	0.08

Plastic bags	0.05	0.02	0.05	0.15	0.07
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	0.07	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

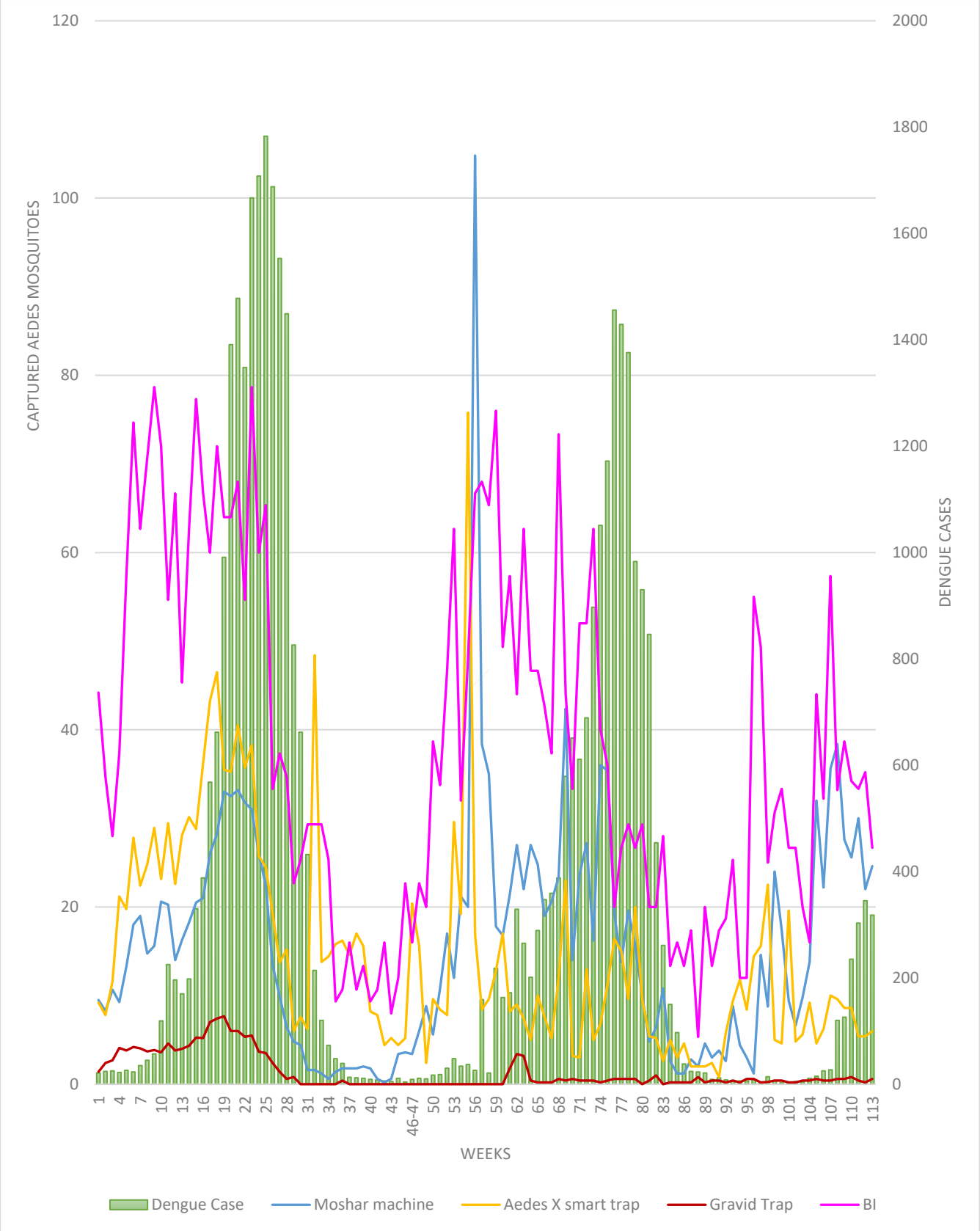


Fig. 13: Correlation between Dengue Cases and *Aedes* Mosquitoes Captured by per Moshar Machine CO_2 traps, Aedes X smart traps, and Gravid traps

NB: DNCC dengue cases only

Photographs of Mosquitoes Surveillance










Samples Collection from Field





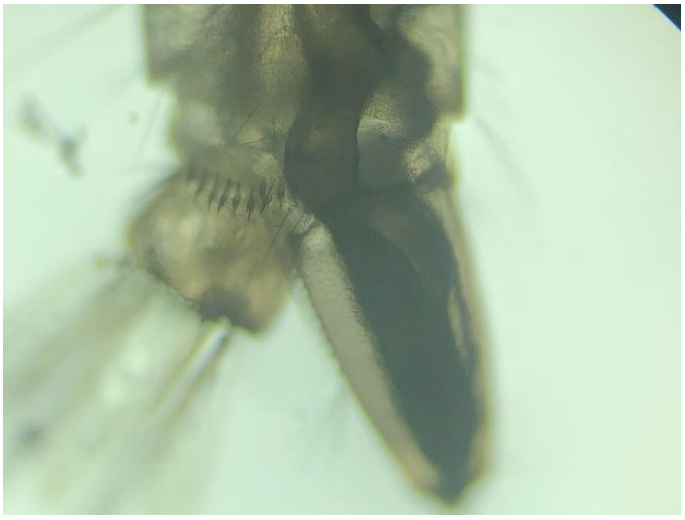



Samples Processing and Identification















Comments:
The mosquito density is increased and the dengue cases increasing rapidly. The Breteau Index (BI) is decreased in week 113. 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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