Weekly Report on

JU-DNCC Mosquitoes Surveillance Program

Week 098 (April 10-15, 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.

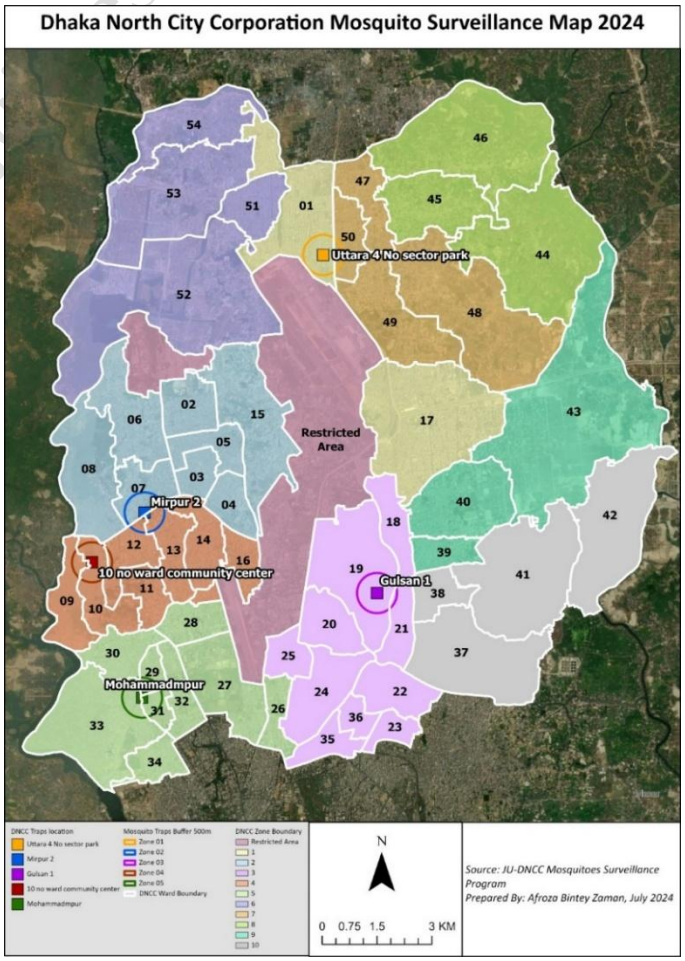
Zone	Traps Location	GPS Location
01	Uttara-4 No sector park	23.8613672,90.4035528
02	Mirpur-2, Vander office, DNCC	23.8036248,90.3601995
03	Gulsan 1, Purantan Vander office	23.7860557,90.4164024
04	10 No ward community center, Mirpur-1	23.7922967,90.3467992
05	Mohammadpur regional office of DNCC	23.7618721,90.3590884

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 98 (April 10-15, 2026)

Zone	N	*Ae. aegypti*	*Ae. albopictus*	*Cx. quinquefasciatus*	*Cx. tritaeniorhynchus*	*Ar. subalbatus*	*An. vagus*	*An. subpictus*	*An. annularis*
1	8929	0	0	1085	2932	132	0	0	24
2	4801	3	4	1927	1641	231	5	4	1
3	2424								
4	66826	4	3	31383	36841	33	24	12	20
5	3418	21	0	1927	609	45	1	0	4
Total	86398	28	7	36322	42023	441	30	16	49
%	100.00	0.04	0.01	46.03	53.25	0.56	0.04	0.02	0.06

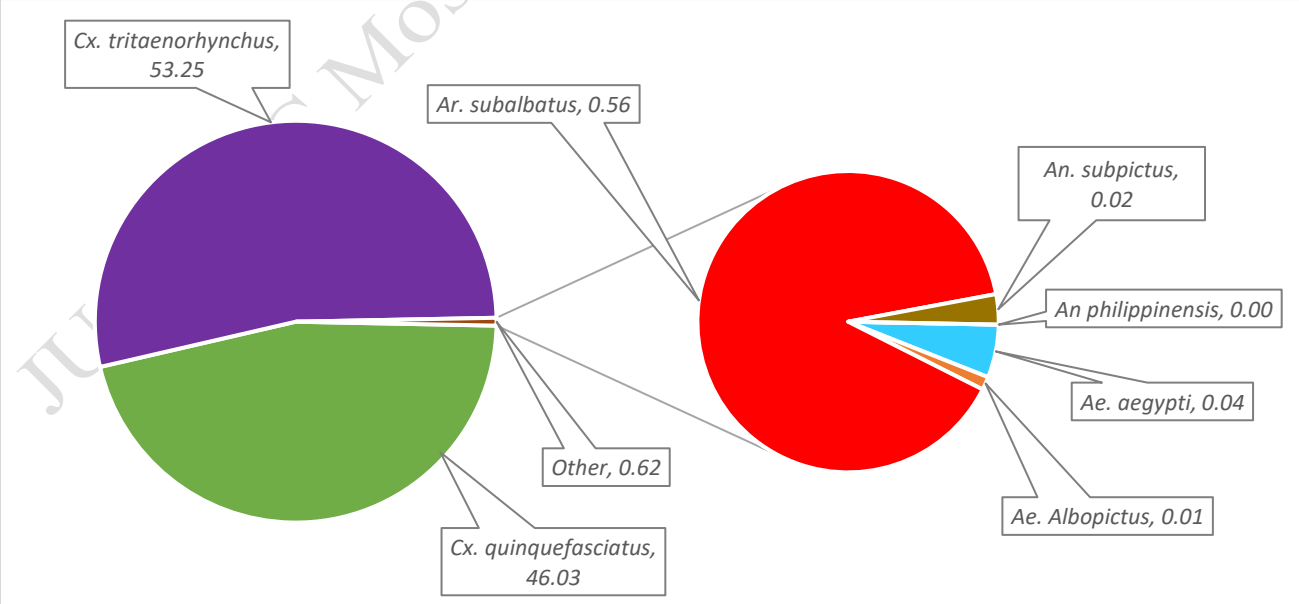


Fig. 1: Percentage of Adult Mosquitoes Collected by Moshar Machine (CO_2) traps in Week 98 (April 10-15, 2026)

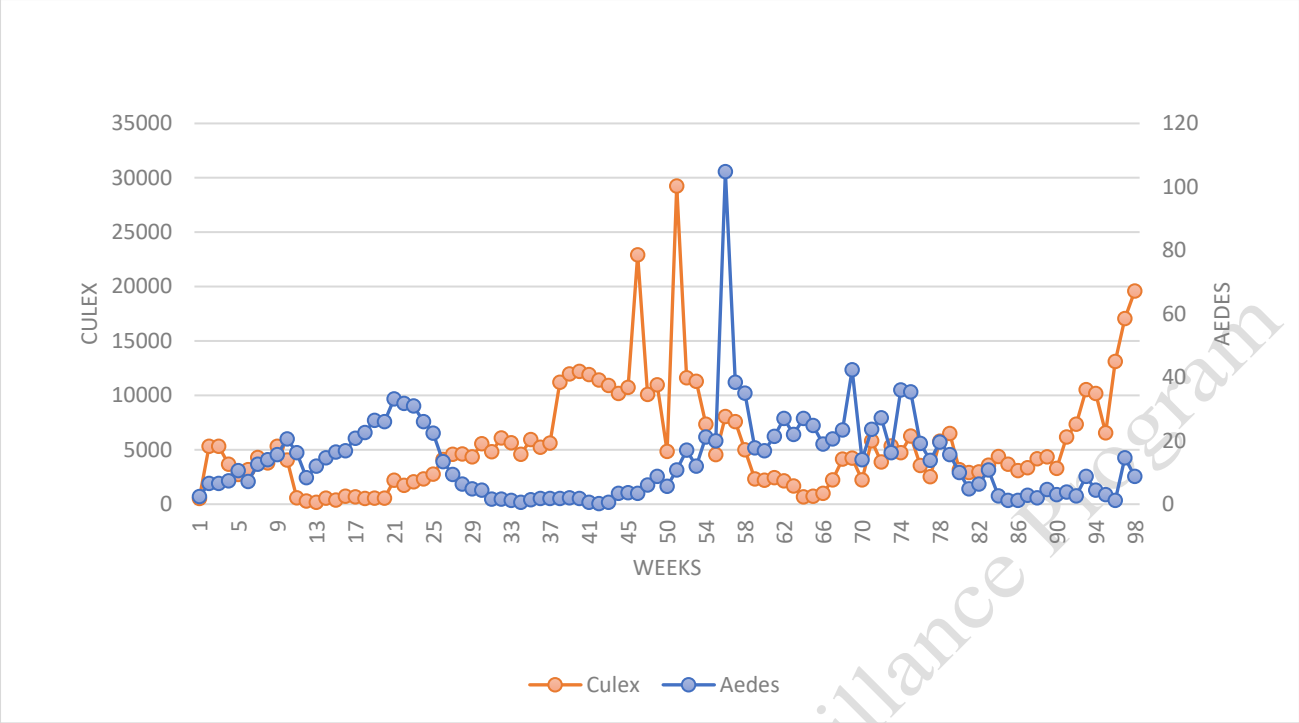


Fig 2: Average number of mosquitoes per Moshar Machine (CO_2) traps from Week 1 to Week 98 (May 2, 2024 - April 17, 2026)

Table 2. Collected Mosquito Larvae from *Aedes* X smart Traps in Week 98 (April 10-15, 2026)

Zone	N	*Ae. aegypti*	*Ae. albopictus*
1	53	0	53
2	35	0	35
3			
4	0	0	0
5	2	2	0
Total	90	2	88
(%)	100	2.22	97.78

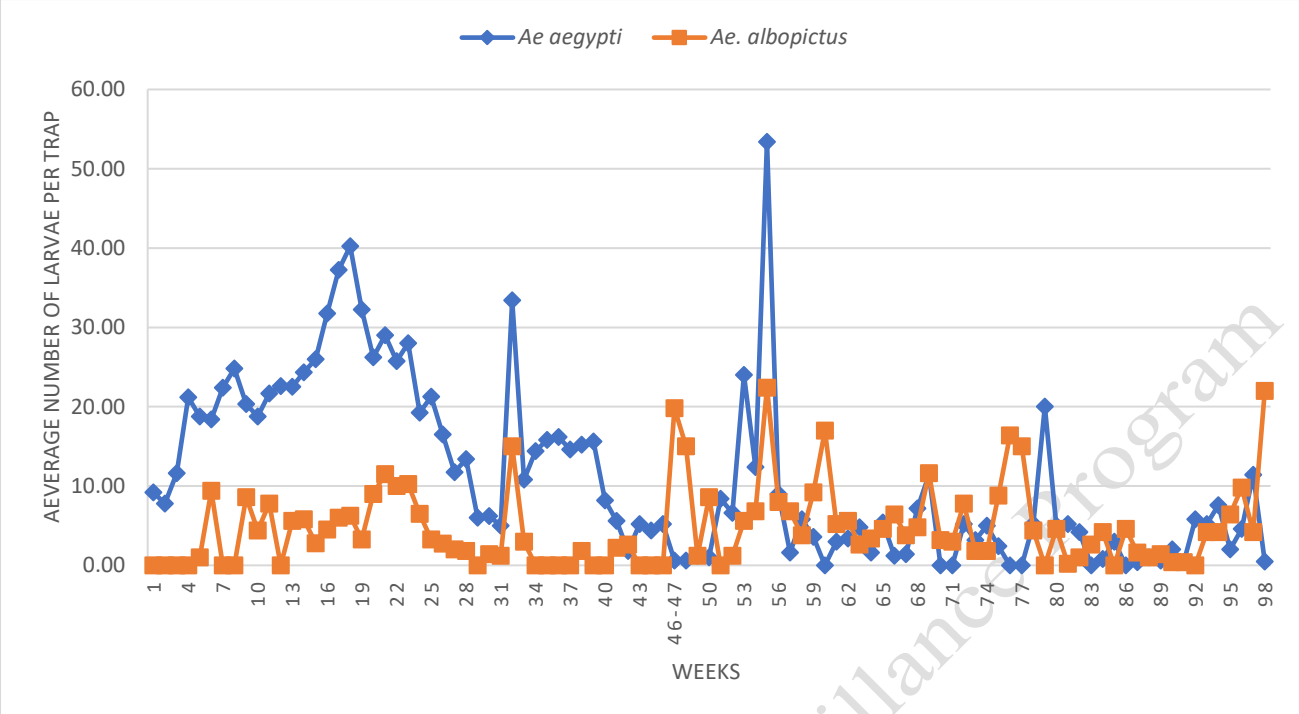


Fig 3: Average Number of *Aedes* Larvae per *Aedes* X Smart Trap in Zones 1-5 from Week 1 to Week 98 (May 2, 2024 - April 17, 2026)

Table 3. Collected Adult Mosquitoes from Gravid Trap in Week 98 (April 10-15, 2026)

Zone	Number of Mosquitoes	*Ae. aegypti*	*Ae. albopictus*	*Cx. quinquefasciatus*
1	1	0	0	1
2	4	0	1	3
3	0			
4	1	0	0	1
5	3	1	0	2
Total	9	1	1	7
(%)	100	11.11	11.11	77.78

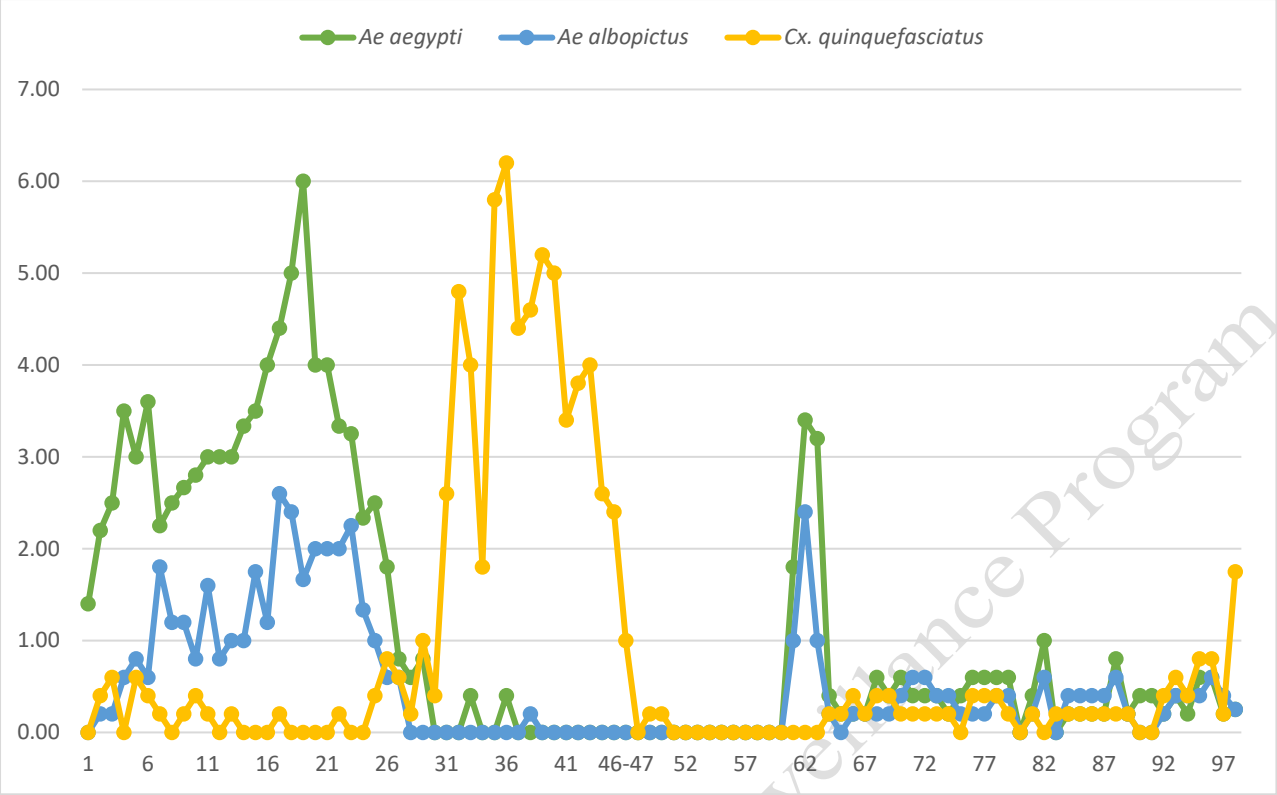


Fig 4: Average number of adult mosquitoes per Gravid trap in zones 1-5 from Week 1 to Week 98 (May 2, 2024 - April 17, 2026)

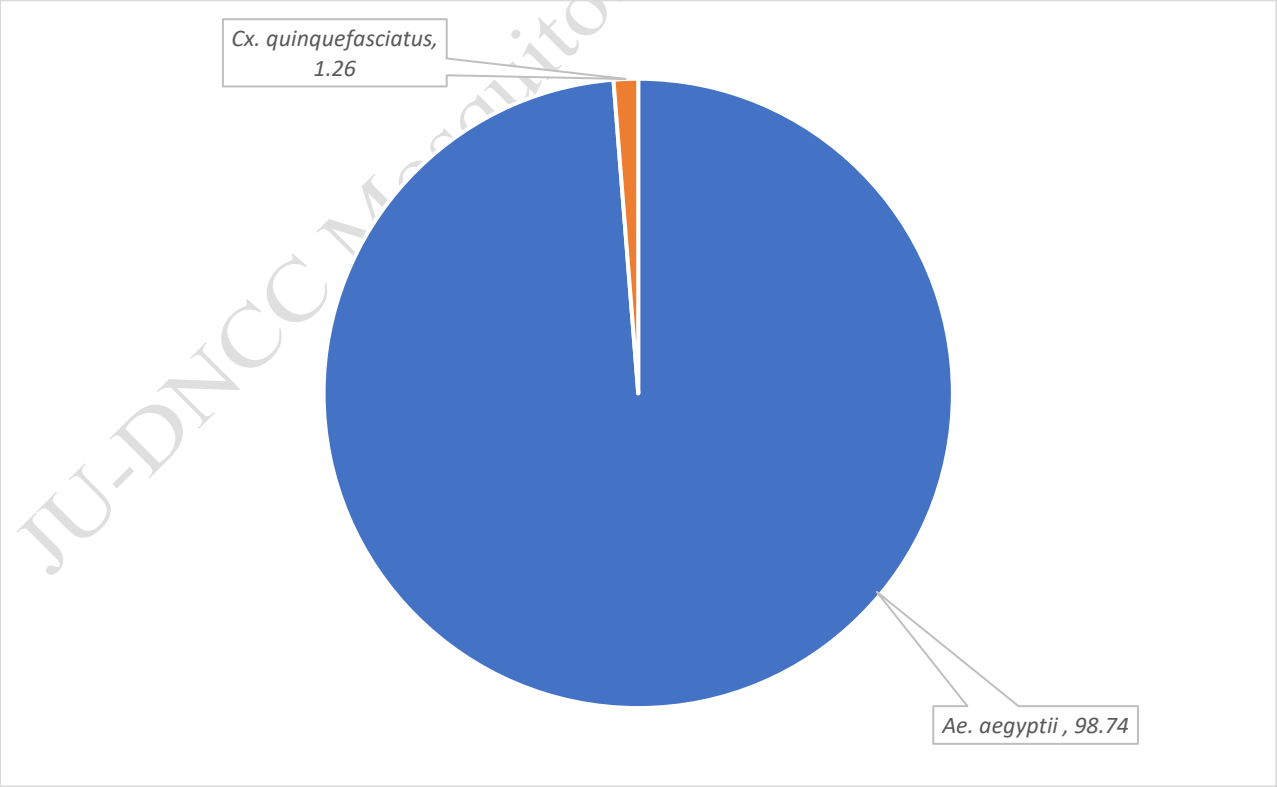


Fig. 5: Percentage of Mosquito Larvae from Zones (1-5) in Week 98 (April 10-15, 2026)

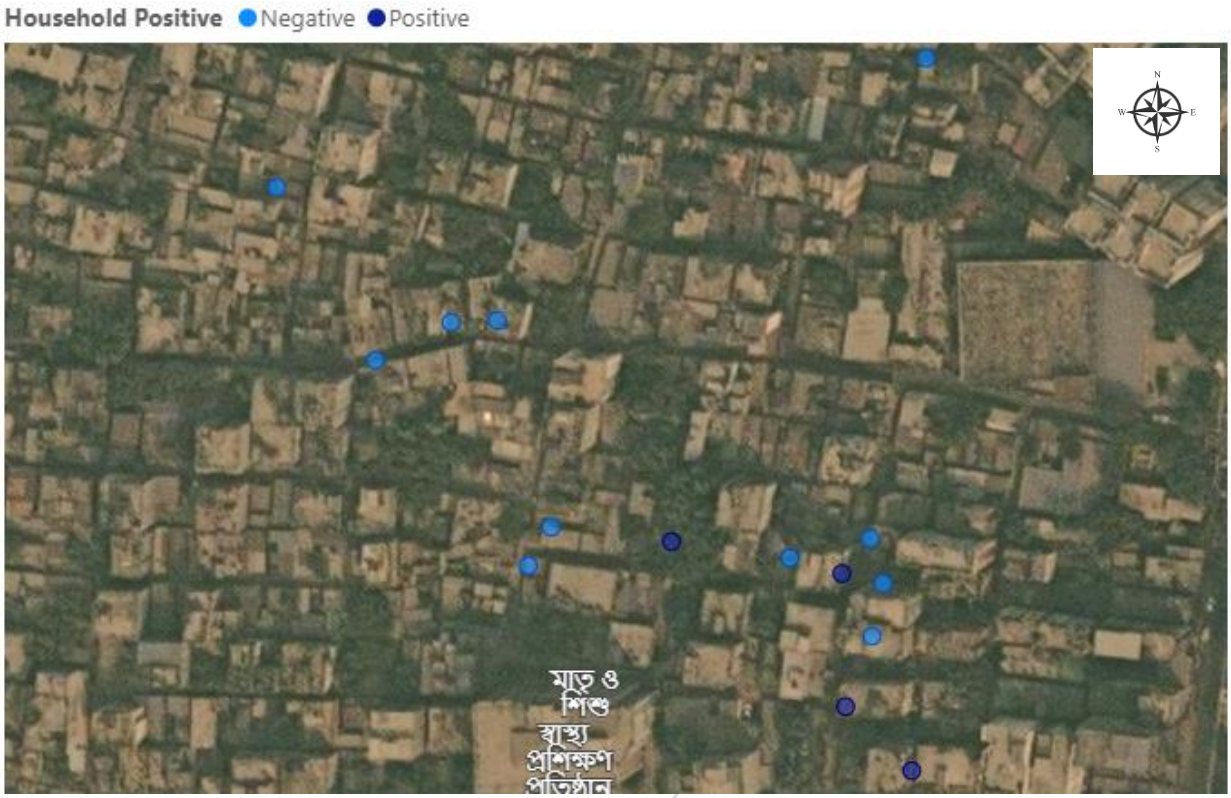
Table 4. Positive Larval Spots in Different Zones (1-5) with Estimated Number of Larvae in Week 98 (April 10-15, 2026)

Zone	GPS Location	*Ae. aegypti*	*Ae. albopictus*	*Cx. quinquefasciatus*	*Source*
1	23.8604089 90.4028714	0	0	7	Other
	23.8605681 90.4025127	23	0	0	Gate Channel
	23.8595086 90.4019544	122	0	0	Hole of water meter
	Total	145	0	7	
2	23.8034675 90.3576676	22	0	0	Other
	23.80342 90.3574386	5	0	0	Dried guard shell
	23.8039342 90.3576198	12	0	0	Plastic Mug/pot/Bodna
	Total	39	0	0	
4	23.7884359 90.3471673	24	0	0	Flower tub & tray
	23.7886092 90.3469716	52	0	0	Plastic drum (Sealable)
	23.7889691 90.3469609	52	0	0	Metal bucket
	23.7890551 90.3464566	87	0	0	Plastic drum (Sealable)
	Total	215	0	0	
5	23.7602257 90.3552191	8	0	0	Plastic Mug/pot/Bodna Discarded /or broken toilet parts
	23.7602185 90.355044	54	0	0	Plastic bucket Other
	23.7600959 90.3542774	89	0	0	Plastic drum (Sealable)
	Total	151	0	0	
Grand Total		550	0	7	

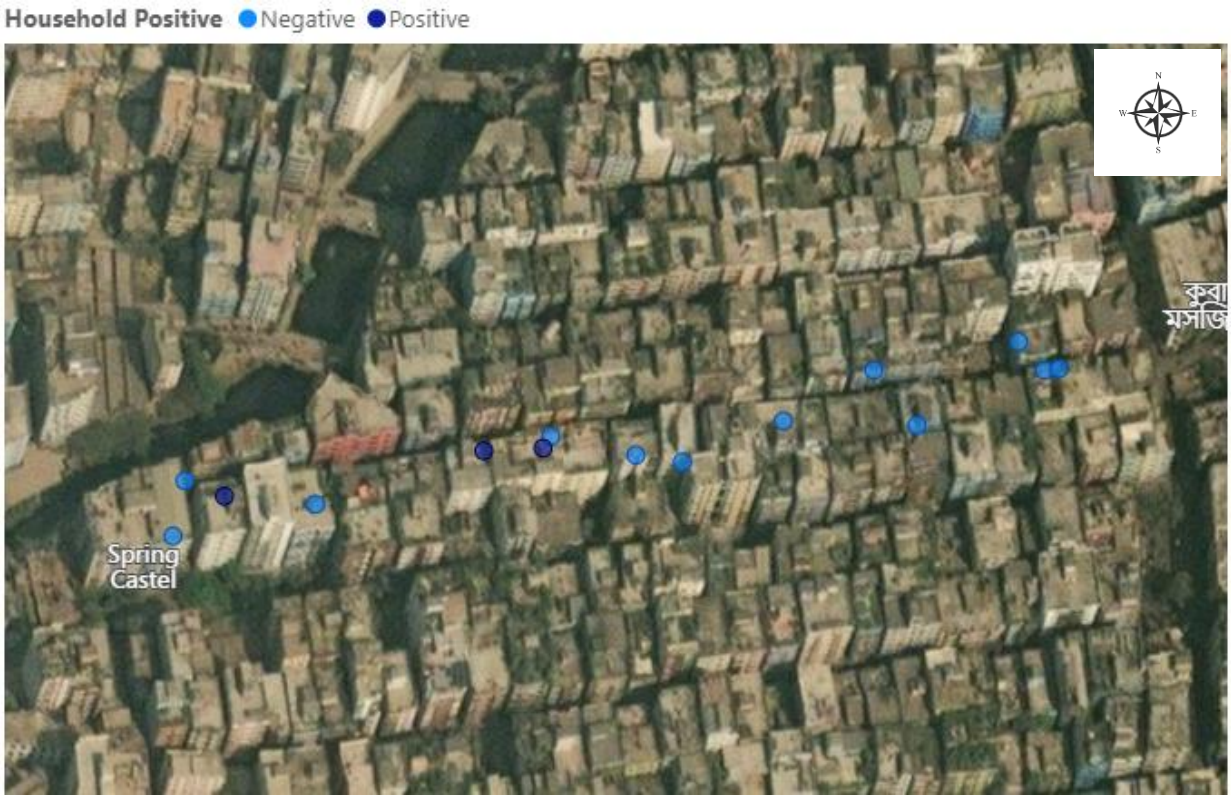
Map 1: Positive and Negative House of Uttara 4 No. Sector at Weeks 98

Map 2: Positive and Negative House of Mirpur 2 at Weeks 98

Map 3 is not available because larval surveillance of Gulshan 1 was not conducted in Week 98 due to the ECB Chattar program.



Map 4: Positive and Negative House of Mirpur 1 at Weeks 98



Map 5: Positive and Negative House of Mohammadpur at Weeks 98

Table 5: Positive House, Wet Container, BI, CI and HI in Zones (1-5) in Week 98 (April 10-15, 2026)

Zone	Total House	Positive House	Total Wet container	Positive Wet Container	BI	CI	HI
1	15	3	28	3	20.00	10.71	20.00
2	15	3	31	3	20.00	9.68	20.00
3	15						
4	15	4	21	5	33.33	23.81	26.67
5	15	3	29	4	26.67	13.79	20.00

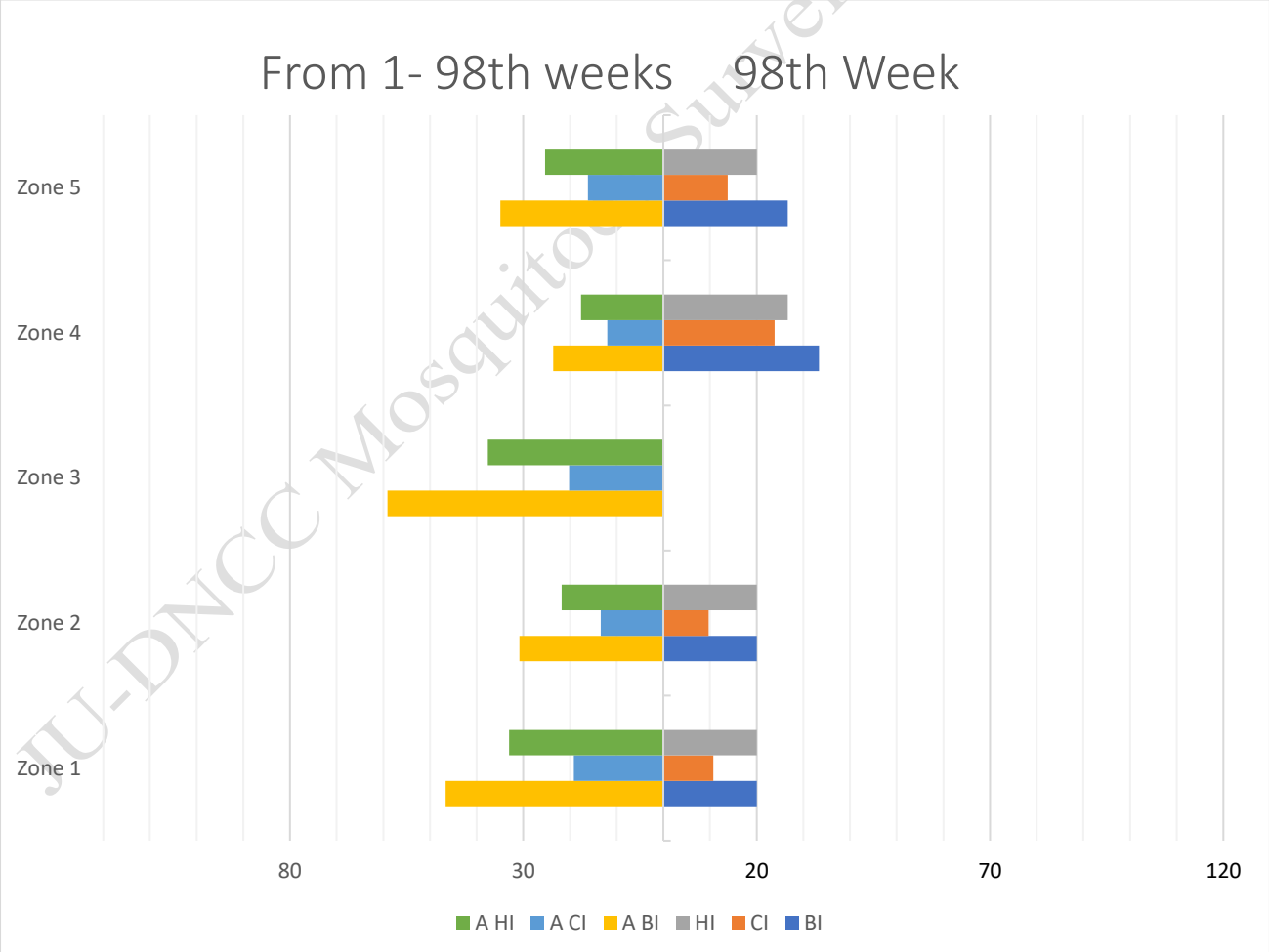


Fig. 6: BI, CI and HI in Different Zones (1-5) of Dhaka north City Corporation

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

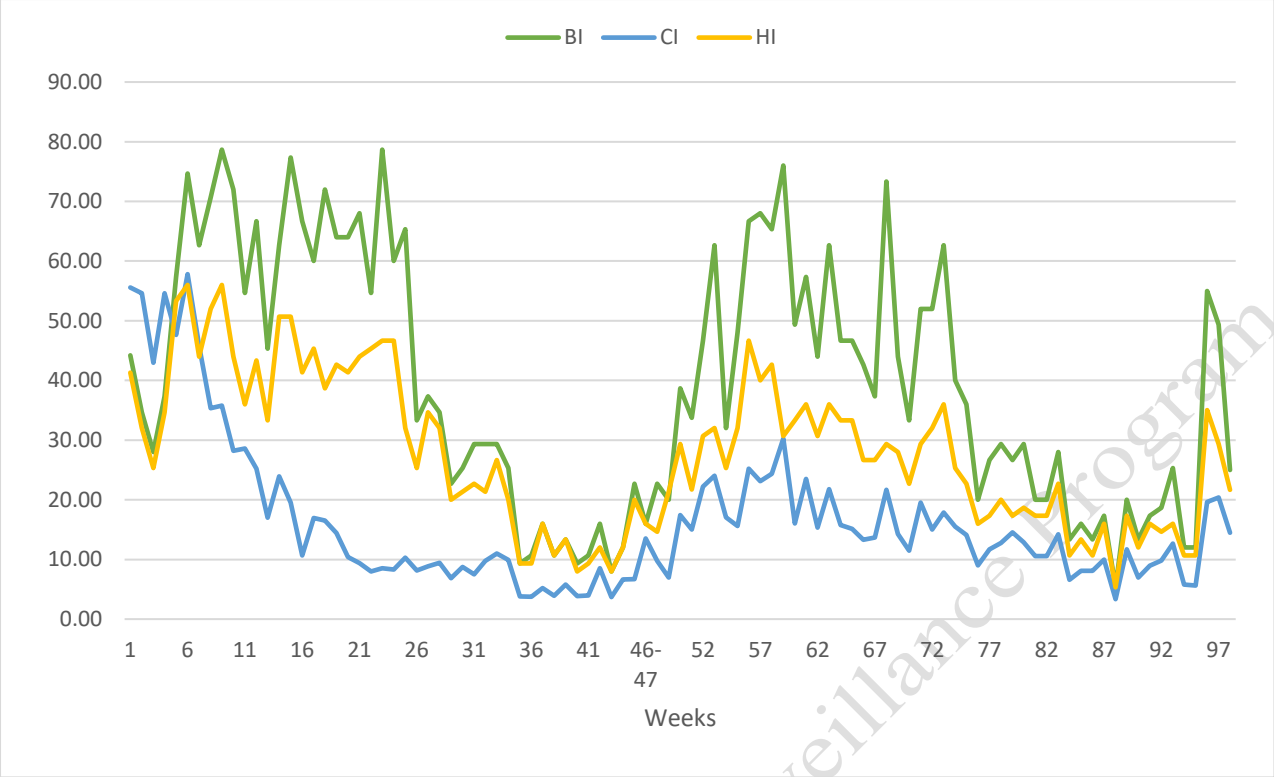


Fig 7: Mosquitoes population fluctuation (BI, CI, HI) from Week 1 to Week 98 (May 2, 2024 - April 17, 2026)

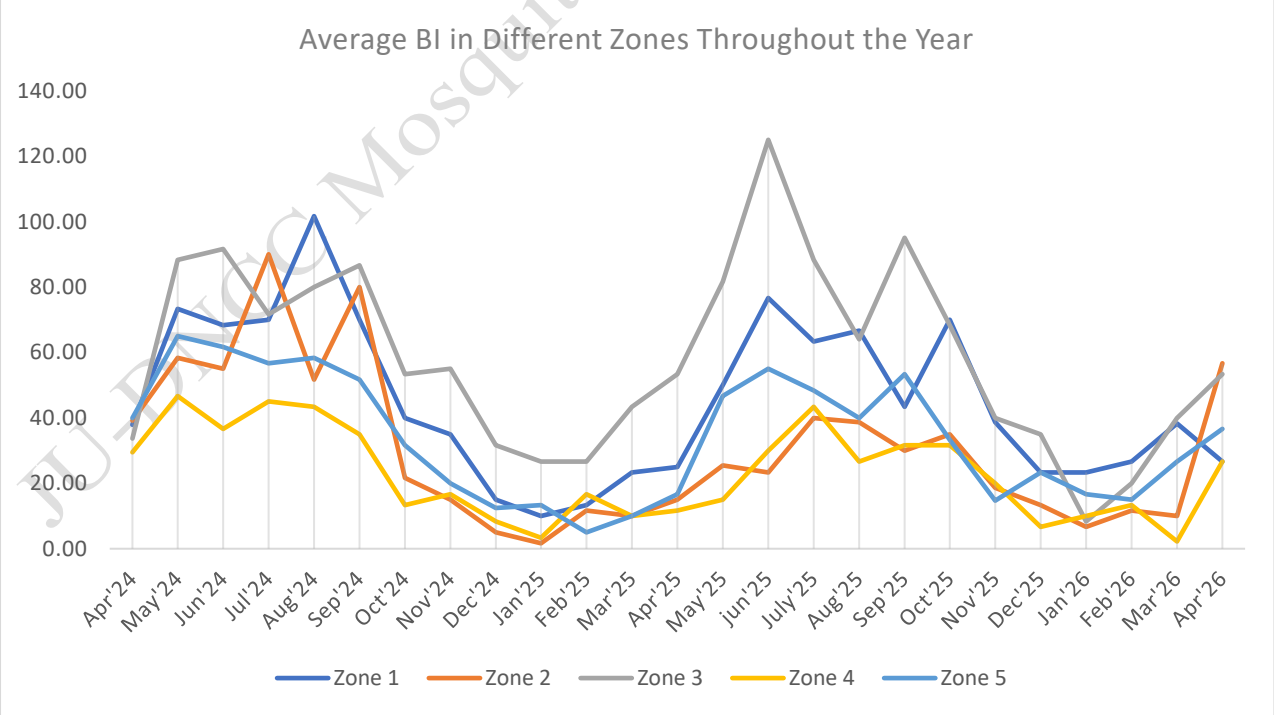


Fig. 8: Breteau Index (BI) in Different Zones from Week 1 to Week 98 (May 2, 2024 - April 17, 2026)

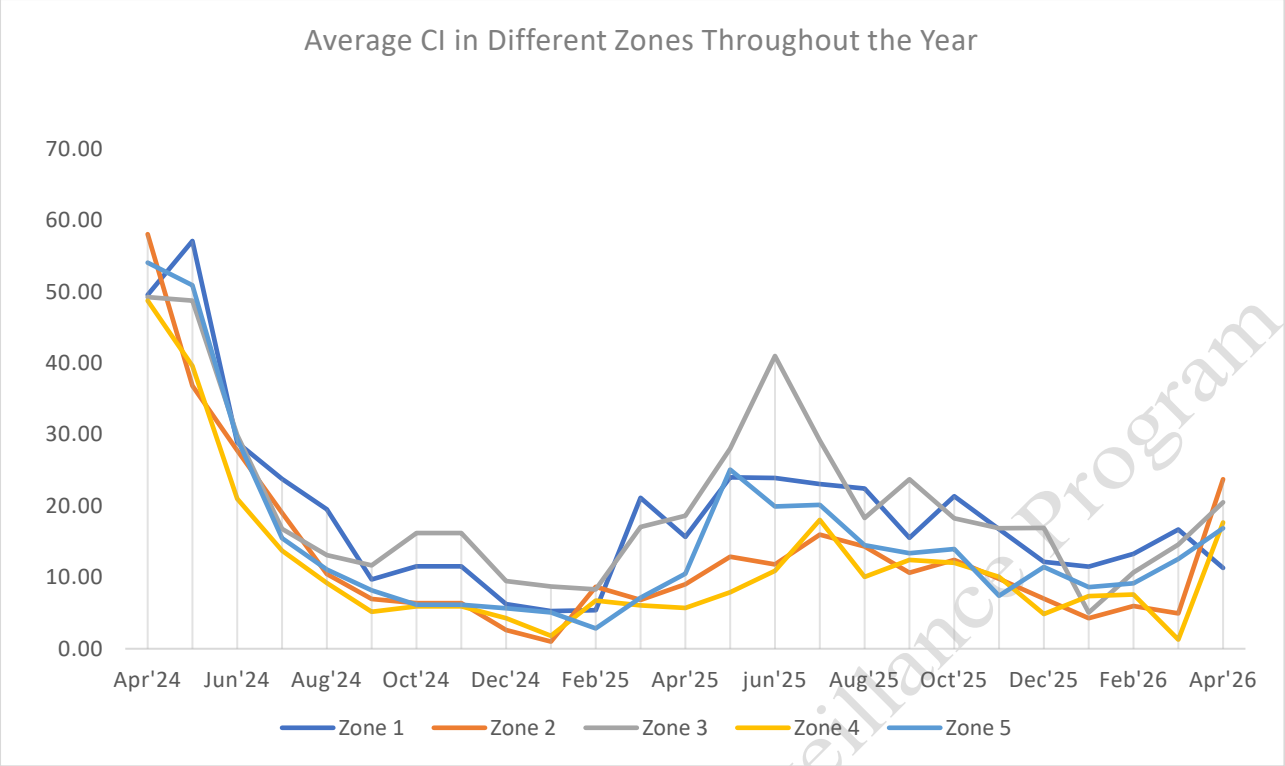


Fig. 9: Container Index (CI) in Different Zones from Week 1 to Week 98 (May 2, 2024 - April 17, 2026)

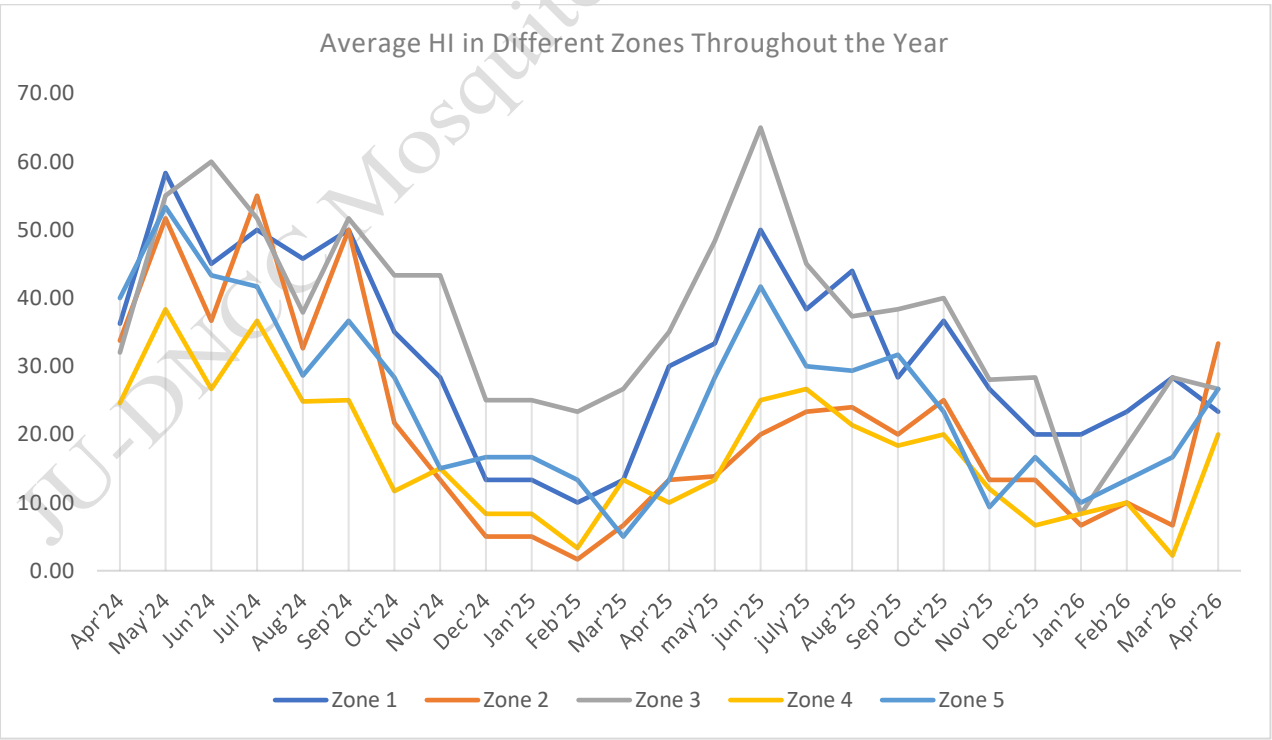


Fig. 10: House Index (HI) in Different Zones from Week 1 to Week 98 (May 2, 2024 - April 17, 2026)

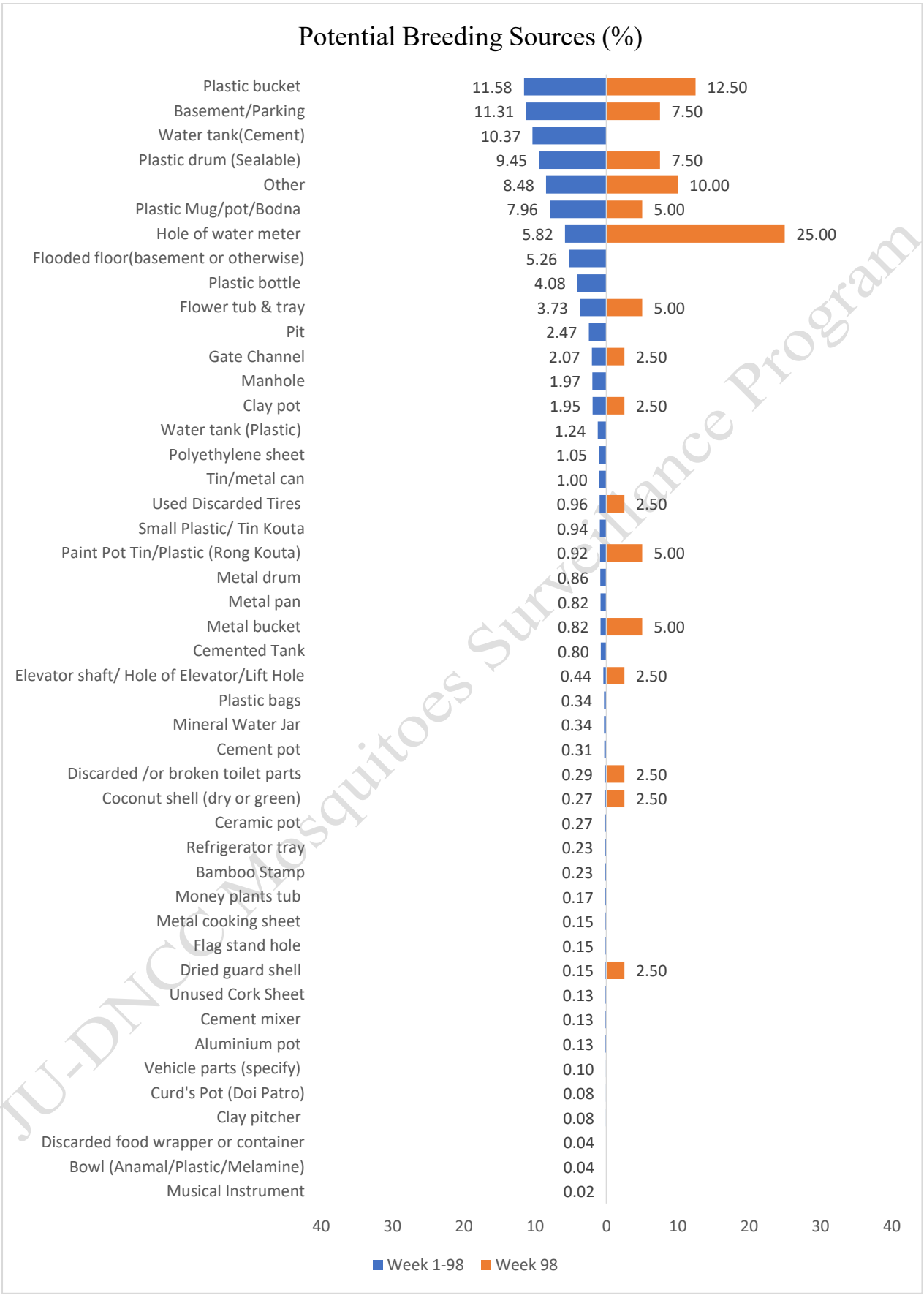


Fig. 11: Container Frequency for *Aedes* mosquitoes in Zones (1-5)

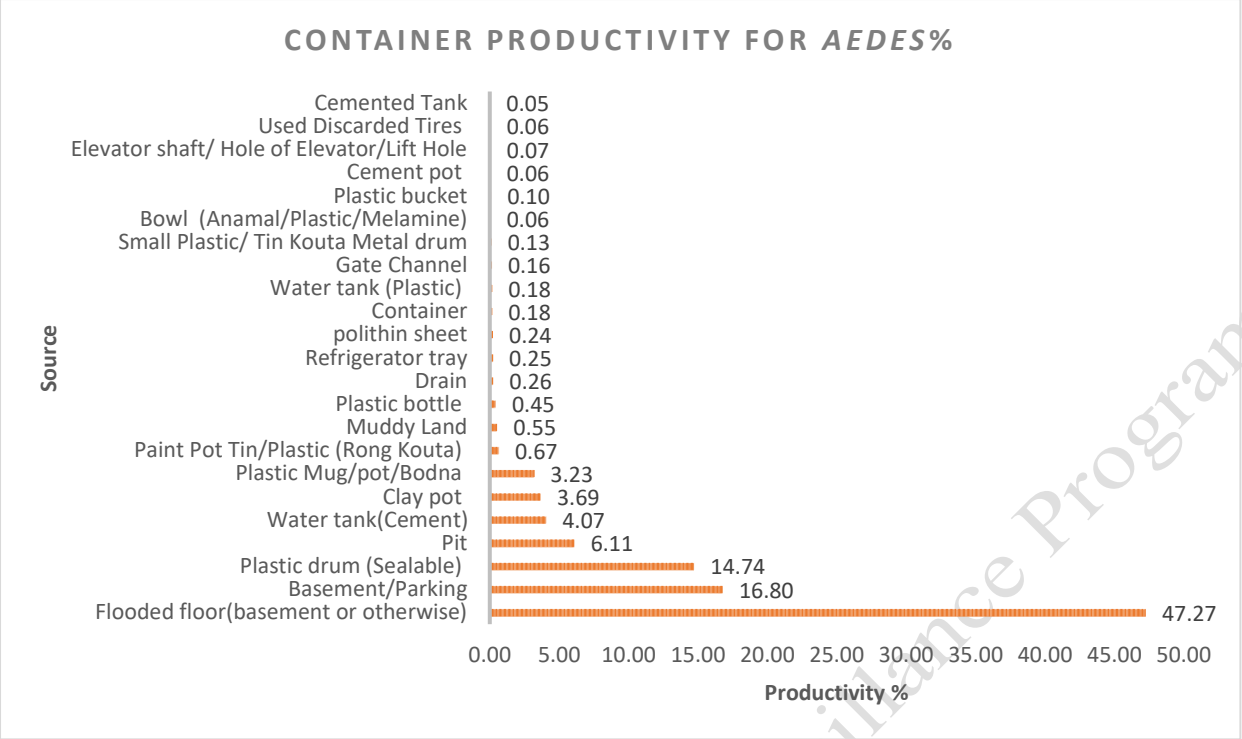


Fig. 12: Container Productivity of *Aedes* mosquito in DNCC from Week 1 to Week 98 (May 2, 2024 - April 17, 2026)

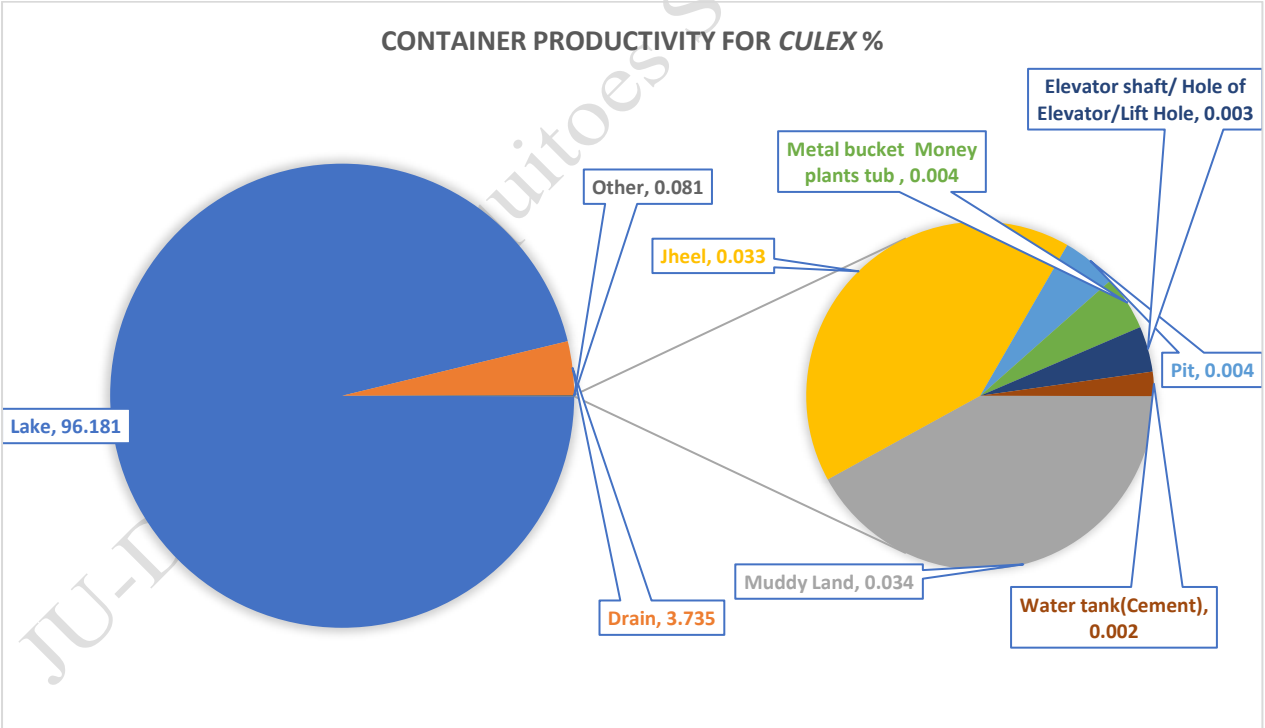


Fig. 13: Container Productivity of *Culex* mosquito in DNCC, from Week 1 to Week 98 (May 2, 2024 - April 17, 2026)

Table 6: Container Frequency & Probable potential Wet Container in zones (1-5) from Week 1 to Week 98 (May 2, 2024 - April 17, 2026)

Sources	+House	-WC	+WC	**Total WC**	% WC	% PWC
Plastic bucket	205	261	344	605	11.58	6.58
Basement/Parking	213	42	549	591	11.31	10.51
Water tank(Cement)	168	252	290	542	10.37	5.55
Plastic drum (Sealable)	234	78	416	494	9.45	7.96
Other	214	130	313	443	8.48	5.99
Plastic Mug/pot/Bodna	169	82	334	416	7.96	6.39
Hole of water meter	57	6	298	304	5.82	5.70
Flooded floor(basement or otherwise)	128	138	137	275	5.26	2.62
Plastic bottle	80	63	150	213	4.08	2.87
Flower tub & tray	73	25	170	195	3.73	3.25
Pit	62	22	107	129	2.47	2.05
Gate Channel	32	34	74	108	2.07	1.42
Manhole	56	29	74	103	1.97	1.42
Clay pot	83	11	91	102	1.95	1.74
Water tank (Plastic)	20	28	37	65	1.24	0.71
Polyethylene sheet	34	3	52	55	1.05	1.00
Tin/metal can	30	0	52	52	1.00	1.00
Used Discarded Tires	29	16	34	50	0.96	0.65
Small Plastic/ Tin Kouta	24	9	40	49	0.94	0.77
Paint Pot Tin/Plastic (Rong Kouta)	30	5	43	48	0.92	0.82
Metal drum	17	7	38	45	0.86	0.73
Metal bucket	21	5	38	43	0.82	0.73
Metal pan	18	3	40	43	0.82	0.77
Cemented Tank	22	13	29	42	0.80	0.55
Elevator shaft/ Hole of Elevator/Lift Hole	8	4	19	23	0.44	0.36
Mineral Water Jar	6	4	14	18	0.34	0.27
Plastic bags	8	1	17	18	0.34	0.33
Cement pot	11	1	15	16	0.31	0.29
Discarded /or broken toilet parts	12	2	13	15	0.29	0.25
Ceramic pot	13	0	14	14	0.27	0.27
Coconut shell (dry or green)	4	0	14	14	0.27	0.27
Bamboo Stamp	9	0	12	12	0.23	0.23
Refrigerator tray	9	0	12	12	0.23	0.23
Money plants tub	7	0	9	9	0.17	0.17
Dried guard shell	5	0	8	8	0.15	0.15
Flag stand hole	4	1	7	8	0.15	0.13
Metal cooking sheet	2	0	8	8	0.15	0.15
Aluminium pot	4	0	7	7	0.13	0.13
Cement mixer	2	0	7	7	0.13	0.13
Unused Cork Sheet	5	1	6	7	0.13	0.11
Vehicle parts (specify)	3	1	4	5	0.10	0.08
Clay pitcher	3	1	3	4	0.08	0.06
Curd's Pot (Doi Patro)	3	0	4	4	0.08	0.08
Bowl (Anamal/Plastic/Melamine)	2	0	2	2	0.04	0.04
Discarded food wrapper or container	1	0	2	2	0.04	0.04
Musical Instrument	1	0	1	1	0.02	0.02

Table 7: Percentage of breeding sources in different zone from Week 1 to Week 98 (May 2, 2024 - April 17, 2026)

Containers	Percentage of Breeding Sources				
	Zone 01	Zone 02	Zone 03	Zone 04	Zone 05
Plastic bucket	2.01	2.05	2.24	2.89	2.39
Basement/Parking	2.79	1.70	2.97	1.13	2.72
Water tank(Cement)	1.32	1.68	1.36	3.00	3.00
Plastic drum (Sealable)	1.36	2.32	1.63	2.18	1.97
Other	2.77	1.47	2.32	0.71	1.21
Plastic Mug/pot/Bodna	1.42	1.44	1.51	2.20	1.40
Hole of water meter	0.73	1.13	0.27	1.86	1.84
Flooded floor(basement or otherwise)	1.36	1.17	0.88	0.57	1.28
Plastic bottle	0.54	0.94	0.59	1.07	0.94
Flower tub & tray	1.09	0.59	1.26	0.46	0.33
Pit	0.65	0.33	0.82	0.33	0.34
Gate Channel	0.78	0.19	0.59	0.08	0.42
Manhole	0.80	0.23	0.61	0.21	0.11
Clay pot	0.25	0.40	0.59	0.23	0.48
Water tank (Plastic)	0.00	0.78	0.17	0.15	0.13
Polyethylene sheet	0.31	0.29	0.21	0.17	0.08
Tin/metal can	0.29	0.27	0.19	0.19	0.06
Used Discarded Tires	0.36	0.27	0.17	0.08	0.08
Small Plastic/ Tin Kouta	0.25	0.17	0.27	0.11	0.13
Paint Pot Tin/Plastic (Rong Kouta)	0.21	0.10	0.27	0.21	0.13
Metal drum	0.17	0.10	0.21	0.29	0.10
Metal bucket	0.11	0.08	0.23	0.25	0.15
Metal pan	0.17	0.15	0.27	0.10	0.13
Cemented Tank	0.15	0.11	0.19	0.23	0.11
Elevator shaft/ Hole of Elevator/Lift Hole	0.19	0.10	0.08	0.00	0.08
Mineral Water Jar	0.04	0.02	0.06	0.15	0.08
Plastic bags	0.04	0.02	0.08	0.11	0.10
Cement pot	0.04	0.00	0.11	0.02	0.13
Discarded /or broken toilet parts	0.02	0.13	0.04	0.00	0.10
Ceramic pot	0.06	0.02	0.06	0.02	0.11
Coconut shell (dry or green)	0.06	0.08	0.06	0.04	0.04
Bamboo Stamp	0.06	0.08	0.04	0.06	0.00
Refrigerator tray	0.08	0.04	0.06	0.04	0.02
Money plants tub	0.06	0.04	0.04	0.00	0.04
Dried guard shell	0.04	0.02	0.08	0.00	0.02
Flag stand hole	0.08	0.02	0.02	0.00	0.04
Metal cooking sheet	0.00	0.02	0.06	0.04	0.04
Aluminium pot	0.02	0.04	0.00	0.06	0.02
Cement mixer	0.00	0.04	0.04	0.02	0.04
Unused Cork Sheet	0.00	0.02	0.04	0.02	0.06
Vehicle parts (specify)	0.02	0.00	0.06	0.02	0.00
Clay pitcher	0.04	0.00	0.02	0.02	0.00
Curd's Pot (Doi Patro)	0.02	0.02	0.04	0.00	0.00
Bowl (Anamal/Plastic/Melamine)	0.02	0.02	0.00	0.00	0.00
Discarded food wrapper or container	0.00	0.00	0.04	0.00	0.00
Musical Instrument	0.02	0.00	0.00	0.00	0.00

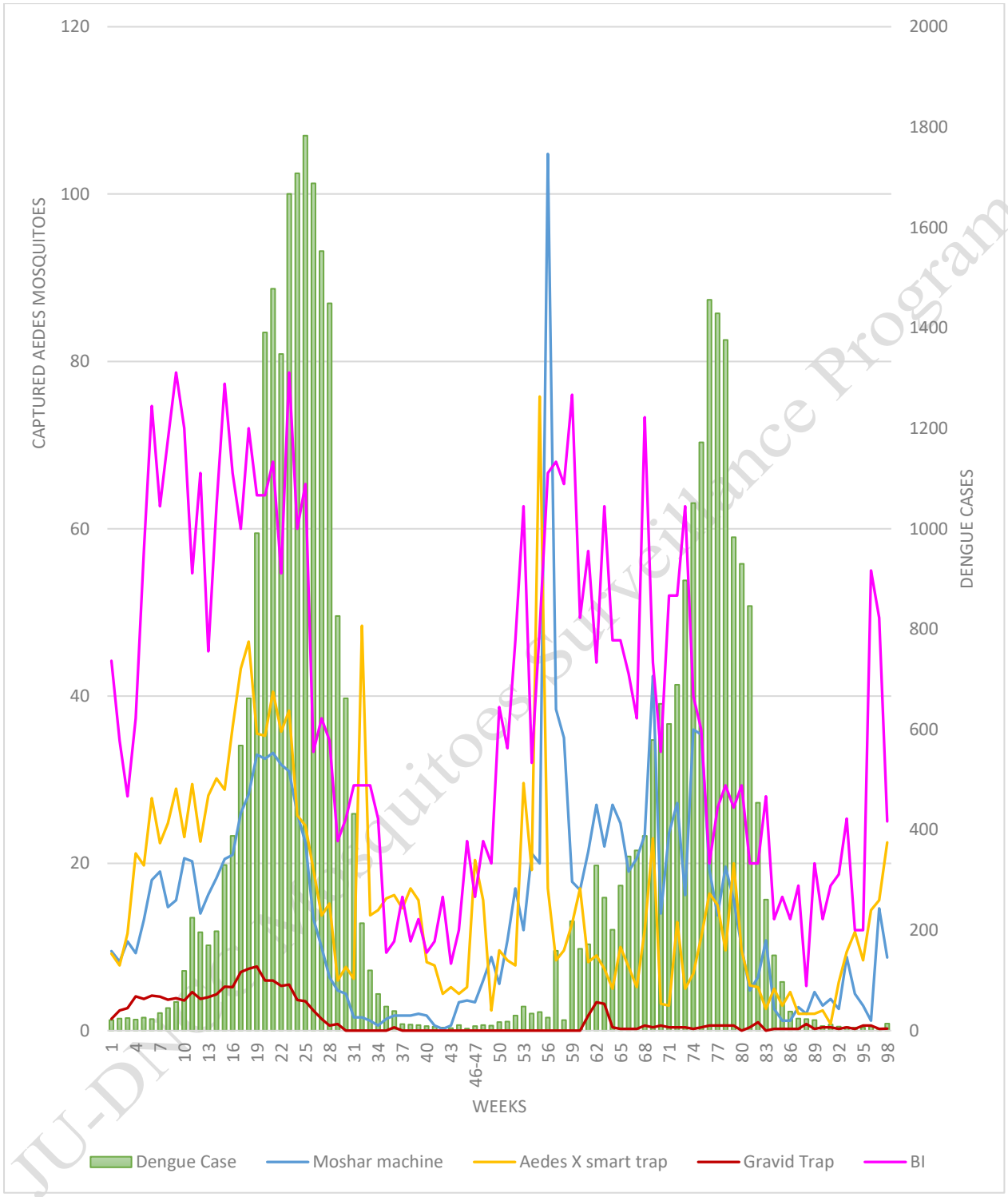


Fig. 14: Correlation between Dengue Cases and *Aedes* Mosquitoes Captured by per Moshar Machine CO_2 traps, Aedes X smart traps, and Gravid traps

NB: DNCC dengue cases only

Photographs of Mosquitoes Surveillance









Samples Collection from Field

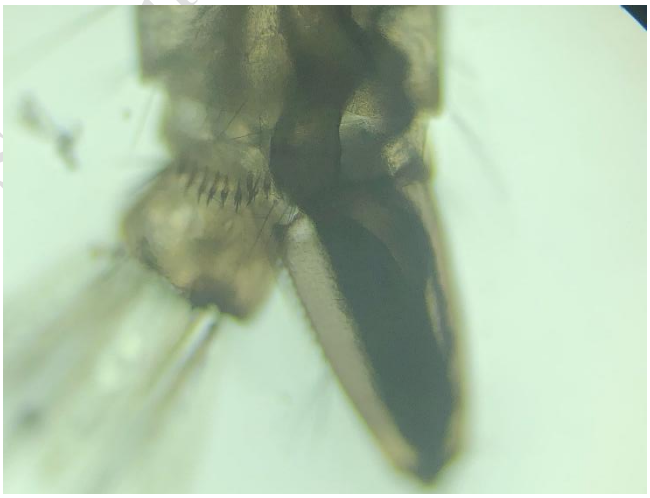








Samples Processing and Identification



Comments:

The mosquito density is decreasing and the dengue cases declining rapidly. The Breteau Index (BI) is decreased in week 98 . 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):

1. CHO, Health Department, Dhaka North City Corporation
2. Secretary, Dhaka North City Corporation
3. PS to Administrator, Dhaka North City Corporation
4. Staff Officer of CEO, Dhaka North City Corporation
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