Weekly Report on

JU-DNCC Mosquitoes Surveillance Program

Week 099 (April 17-21, 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.

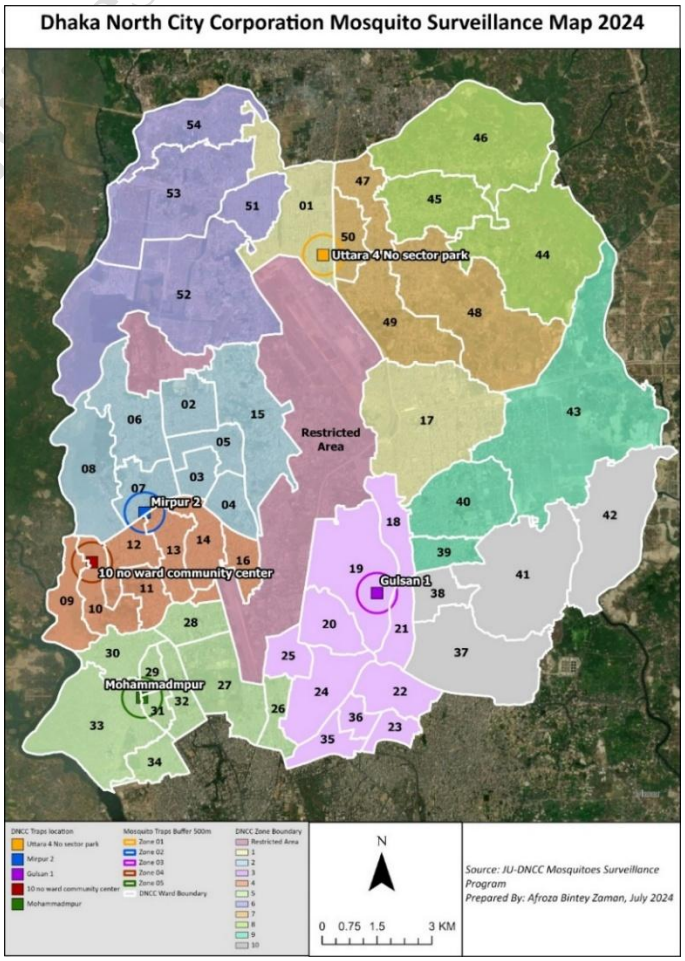
Zone	Traps Location	GPS Location
01	Uttara-4 No sector park	23.8613672,90.4035528
02	Mirpur-2, Vander office, DNCC	23.8036248,90.3601995
03	Gulsan 1, Purantan Vander office	23.7860557,90.4164024
04	10 No ward community center, Mirpur-1	23.7922967,90.3467992
05	Mohammadpur regional office of DNCC	23.7618721,90.3590884

For the Adult mosquito collection

1. Light trap
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 99 (April 17-21, 2026)

Zone	N	*Ae. aegypti*	*Ae. albopictus*	*Cx. quinquefasciatus*	*Cx. tritaeniorhynchus*	*Ar. subalbatus*	*An. vagus*	*An. subpictus*	*An. annularis*
1	10855	9	4	5046	5690	81	9	3	13
2	1651	13	0	1107	349	176	2	1	3
3	2100	5	1	1880	154	60	0	0	0
4	50433	20	4	29660	20612	128	6	3	0
5	3152	64	0	2155	757	176	0	0	0
Total	68191	111	9	39848	27562	621	17	7	16
%	100.00	0.16	0.01	58.44	40.42	0.91	0.02	0.01	0.02

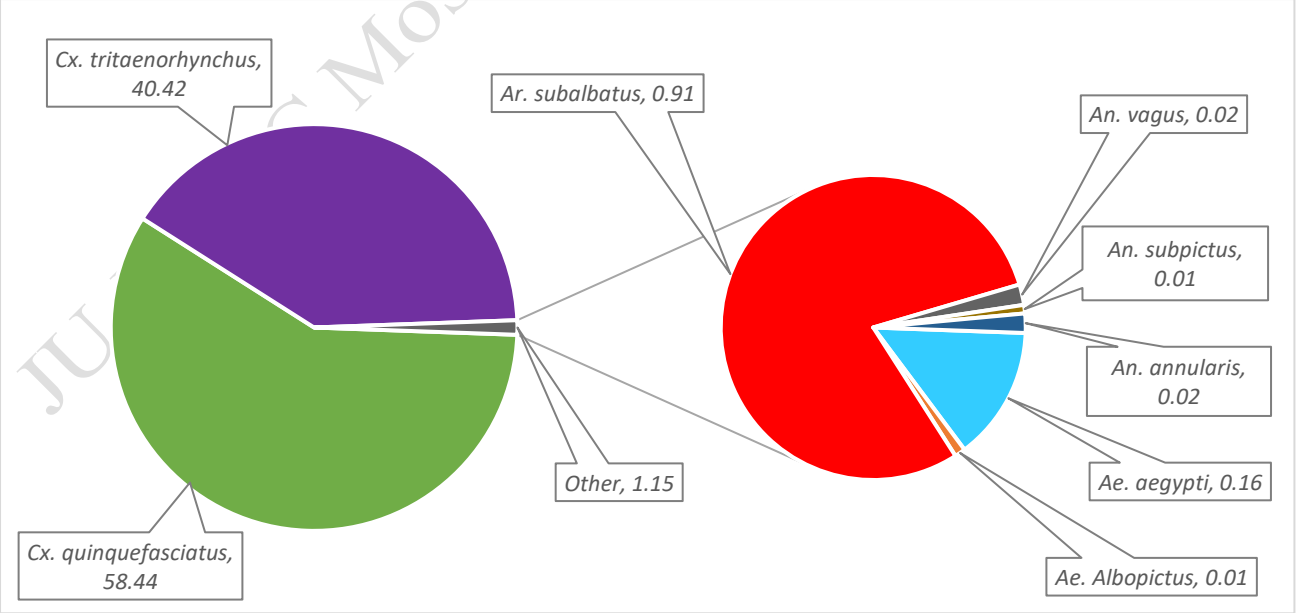


Fig. 1: Percentage of Adult Mosquitoes Collected by Moshar Machine (CO_2) traps in Week 99 (April 17-21, 2026)

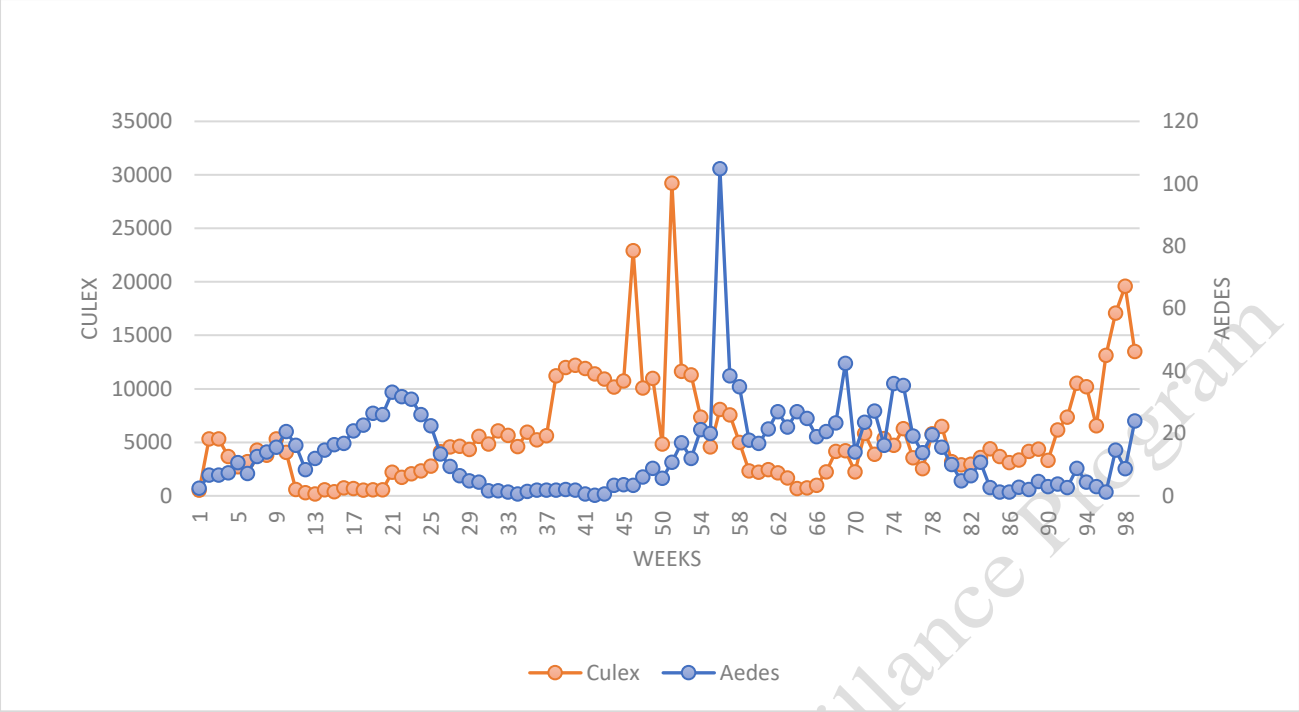


Fig 2: Average number of mosquitoes per Moshar Machine (CO_2) traps from Week 1 to Week 99 (May 2, 2024 - April 21, 2026)

Table 2. Collected Mosquito Larvae from *Aedes* X smart Traps in Week 99 (April 17-21, 2026)

Zone	N	*Ae. aegypti*	*Ae. albopictus*
1	19	0	19
2	6	6	0
3	0	0	0
4	0	0	0
5	0	0	0
Total	25	6	19
(%)	100	24.00	76.00

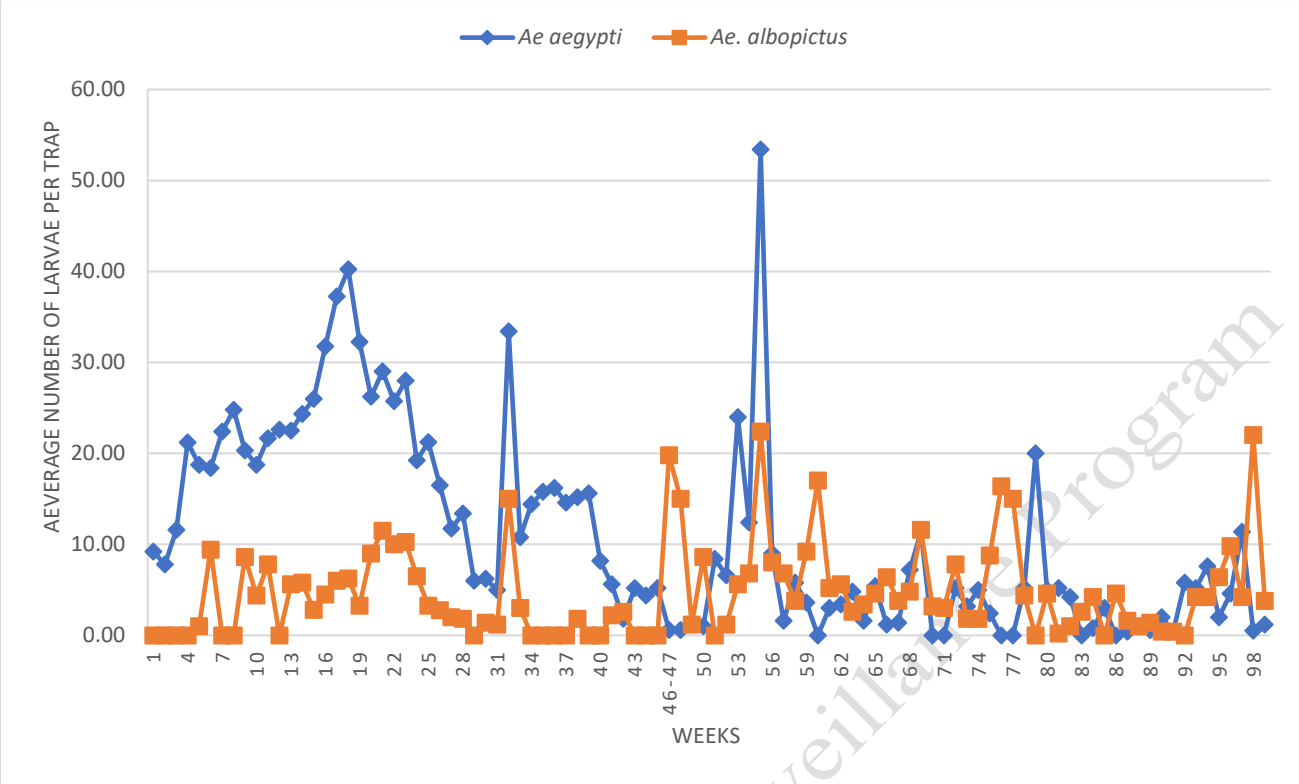


Fig 3: Average Number of *Aedes* Larvae per *Aedes* X Smart Trap in Zones 1-5 from Week 1 to Week 99 (May 2, 2024 - April 21, 2026)

Table 3. Collected Adult Mosquitoes from Gravid Trap in Week 99 (April 17-21, 2026)

Zone	Number of Mosquitoes	*Ae. aegypti*	*Ae. albopictus*	*Cx. quinquefasciatus*
1	3	1	0	2
2	2	0	1	1
3	0	0	0	0
4	1	0	0	1
5	1	1	0	0
Total	7	2	1	4
(%)	100	28.57	14.29	57.14

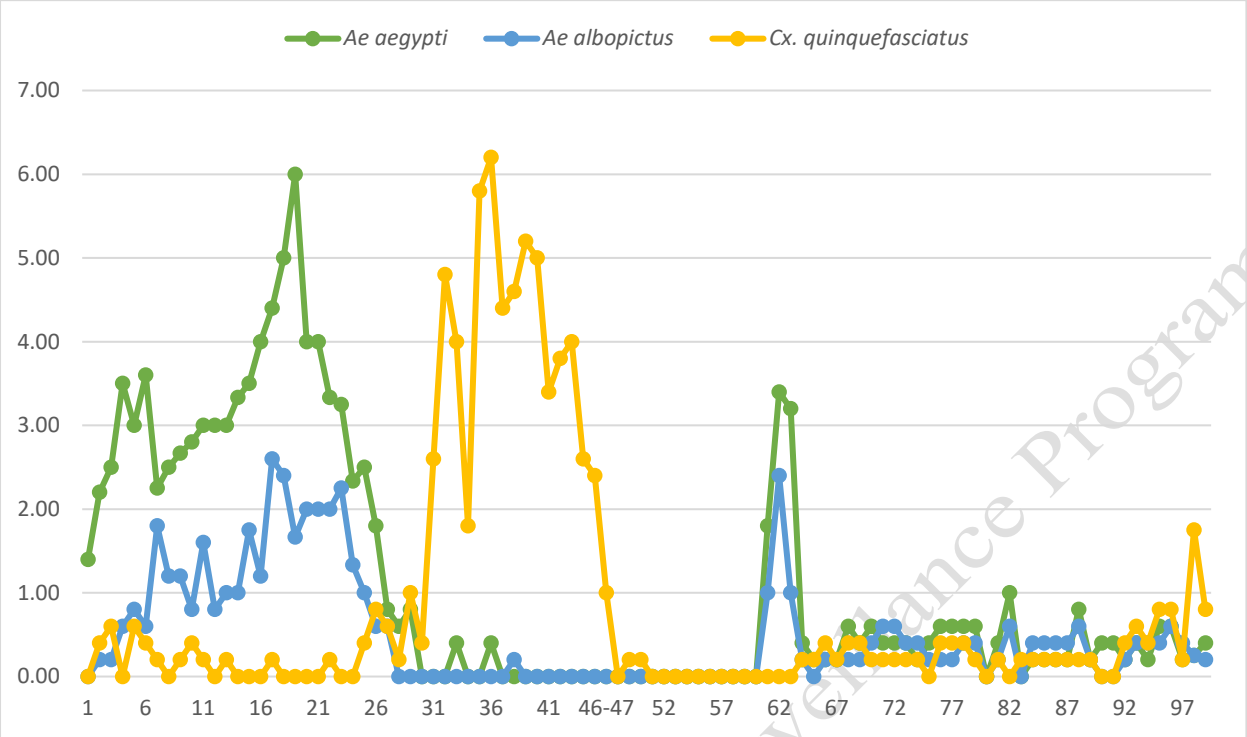


Fig 4: Average number of adult mosquitoes per Gravid trap in zones 1-5 from Week 1 to Week 99 (May 2, 2024 - April 21, 2026)

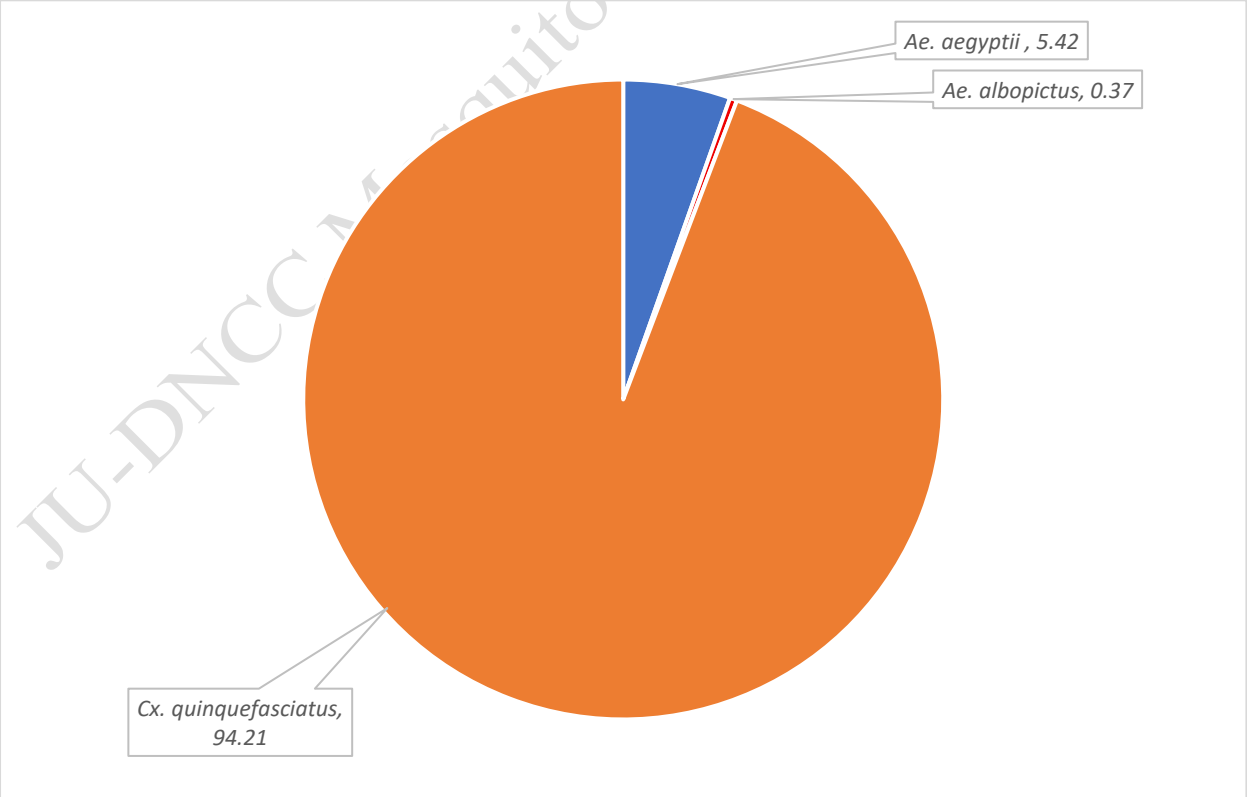
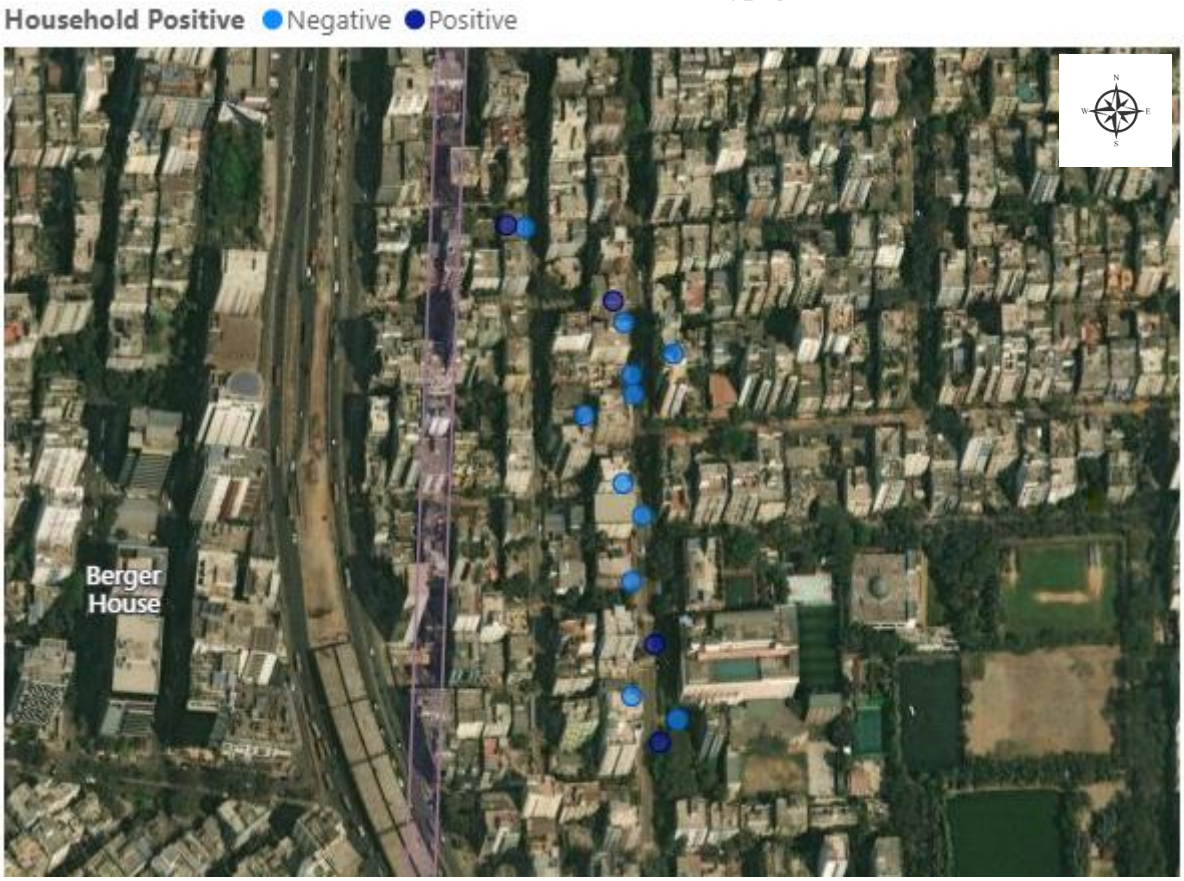


Fig. 5: Percentage of Mosquito Larvae from Zones (1-5) in Week 99 (April 17-21, 2026)

Table 4. Positive Larval Spots in Different Zones (1-5) with Estimated Number of Larvae in Week 99 (April 17-21, 2026)

Zone	GPS Location	*Ae. aegypti*	*Ae. albopictus*	*Cx. quinquefasciatus*	*Source*
1	23.8609829 90.4017851	82	0	0	Basement/Parking
	23.8612102 90.4016339	21	0	0	Other
	23.8614622 90.401757	0	32	0	Basement/Parking
	23.8631439 90.4015355	52	0	0	Plastic Mug/pot/Bodna
	23.8635162 90.4009643	9	0	0	Basement/Parking
	Total	164	32	0	
2	23.8055835 90.3595963	52	0	0	Plastic Mug/pot/Bodna
	23.8052291 90.3573908	23	0	0	Basement/Parking
	23.8049983 90.3570392	52	0	0	Pit
	23.8049779 90.3569275	0	0	24	Basement/Parking Other
	Total	127	0	24	
3	23.7857497 90.4166381	0	0	5488	Drain
	23.7857471 90.4166618	0	0	2588	Drain
	23.7851407 90.4174928	0	0	35	Other Pit
	23.7850702 90.4181388	0	0	82	Drain
	23.7845087 90.4190966	23	0	0	Basement/Parking
	23.7836995 90.4178245	21	0	0	Flower tub & tray Plastic Mug/pot/Bodna
	Total	44	0	8193	

4	23.7908701 90.346679	23	0	0	Plastic bucket
	23.7909713 90.3462378	0	0	23	Water tank(Cement)
	Total	23	0	23	
5	23.7598215 90.3587454	21	0	0	Plastic drum (Sealable) Other
	23.7595117 90.357853	53	0	0	Plastic bucket
	23.7599896 90.3576395	21	0	0	Money plants tub
	23.7619874 90.357852	21	0	0	Basement/Parking Pit
	Total	116	0	0	
Grand Total		474	32	8240	



Map 1: Positive and Negative House of Uttara 4 No. Sector at Weeks 99

Map 2: Positive and Negative House of Mirpur 2 at Weeks 99

Map 3: Positive and Negative House of Gulshan 1 at Weeks 99

Map 4: Positive and Negative House of Mirpur 1 at Weeks 99

Map 5: Positive and Negative House of Mohammadpur at Weeks 99

Table 5: Positive House, Wet Container, BI, CI and HI in Zones (1-5) in Week 99 (April 17-21, 2026)

Zone	Total House	Positive House	Total Wet container	Positive Wet Container	BI	CI	HI
1	15	5	27	6	40.00	22.22	33.33
2	15	4	25	5	33.33	20.00	26.67
3	15	6	29	5	33.33	17.24	40.00
4	15	2	35	2	13.33	5.71	13.33
5	15	4	37	5	33.33	13.51	26.67

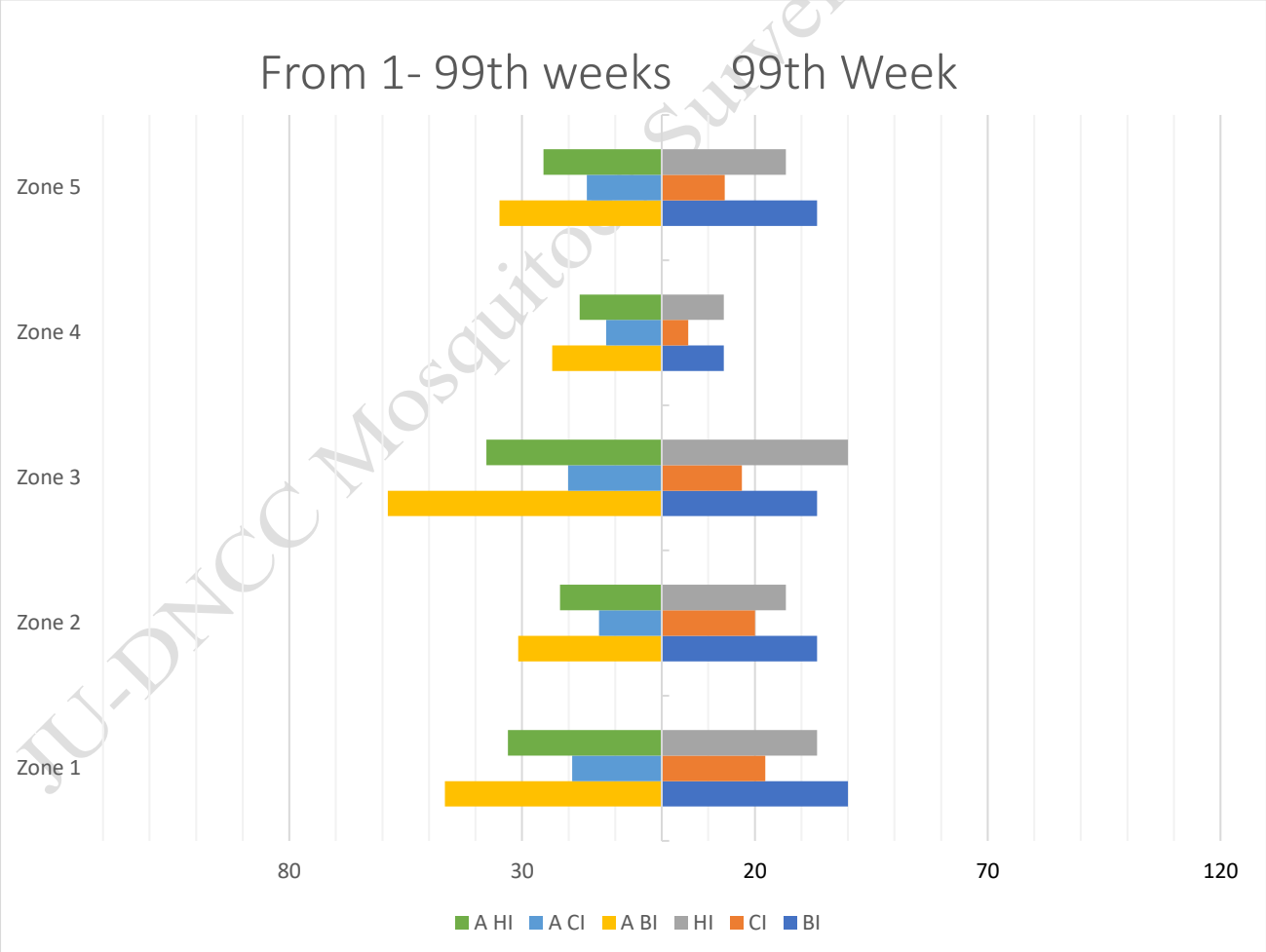


Fig. 6: BI, CI and HI in Different Zones (1-5) of Dhaka north City Corporation

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

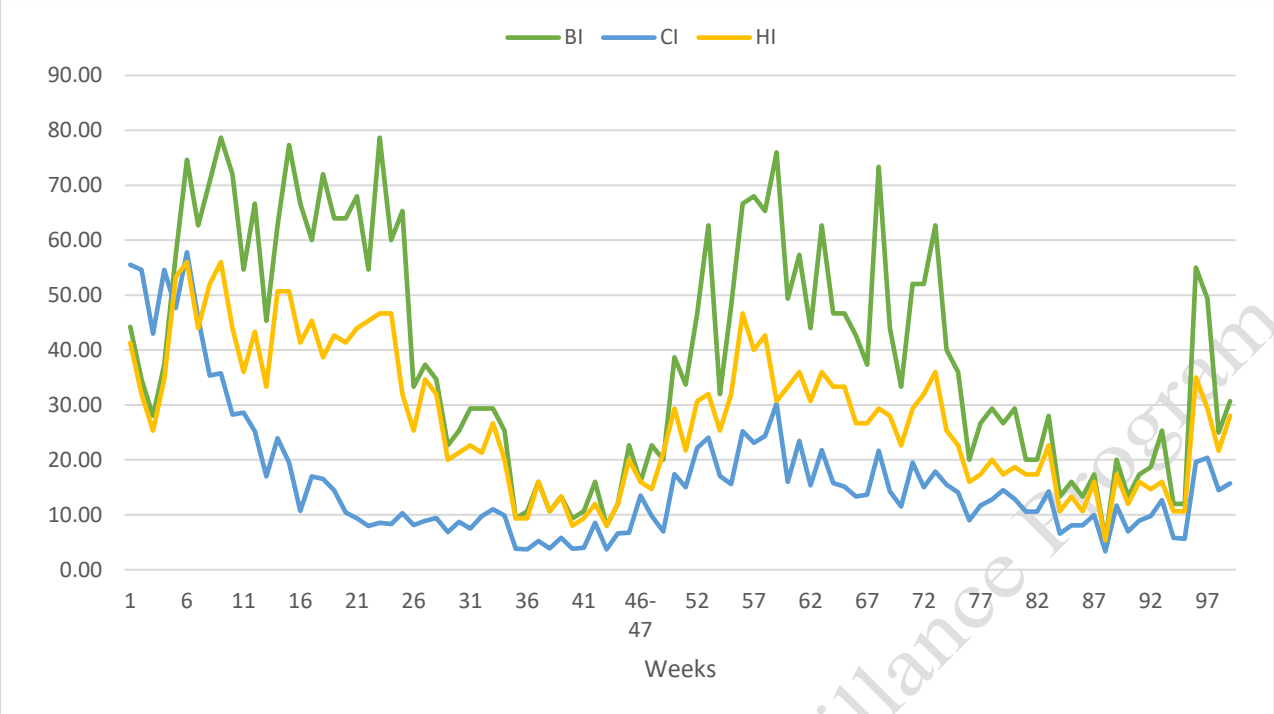


Fig 7: Mosquitoes population fluctuation (BI, CI, HI) from Week 1 to Week 99 (May 2, 2024 - April 21, 2026)

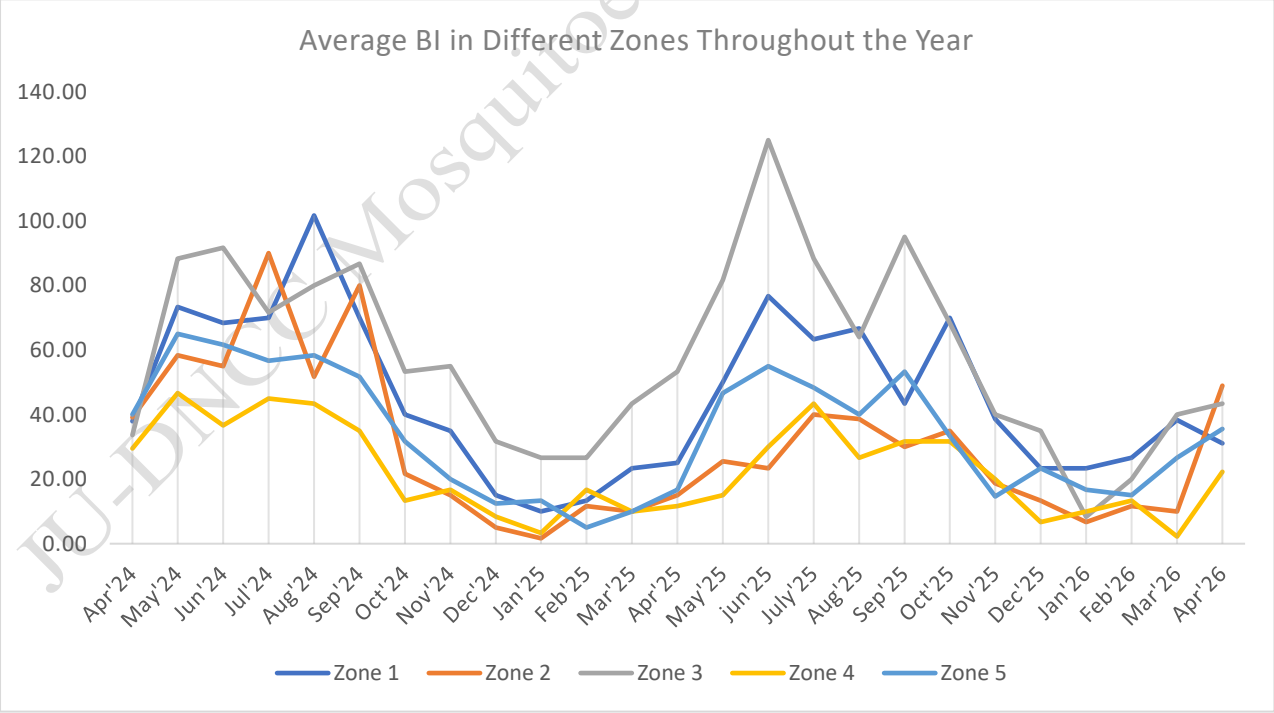


Fig. 8: Breteau Index (BI) in Different Zones from Week 1 to Week 99 (May 2, 2024 - April 21, 2026)

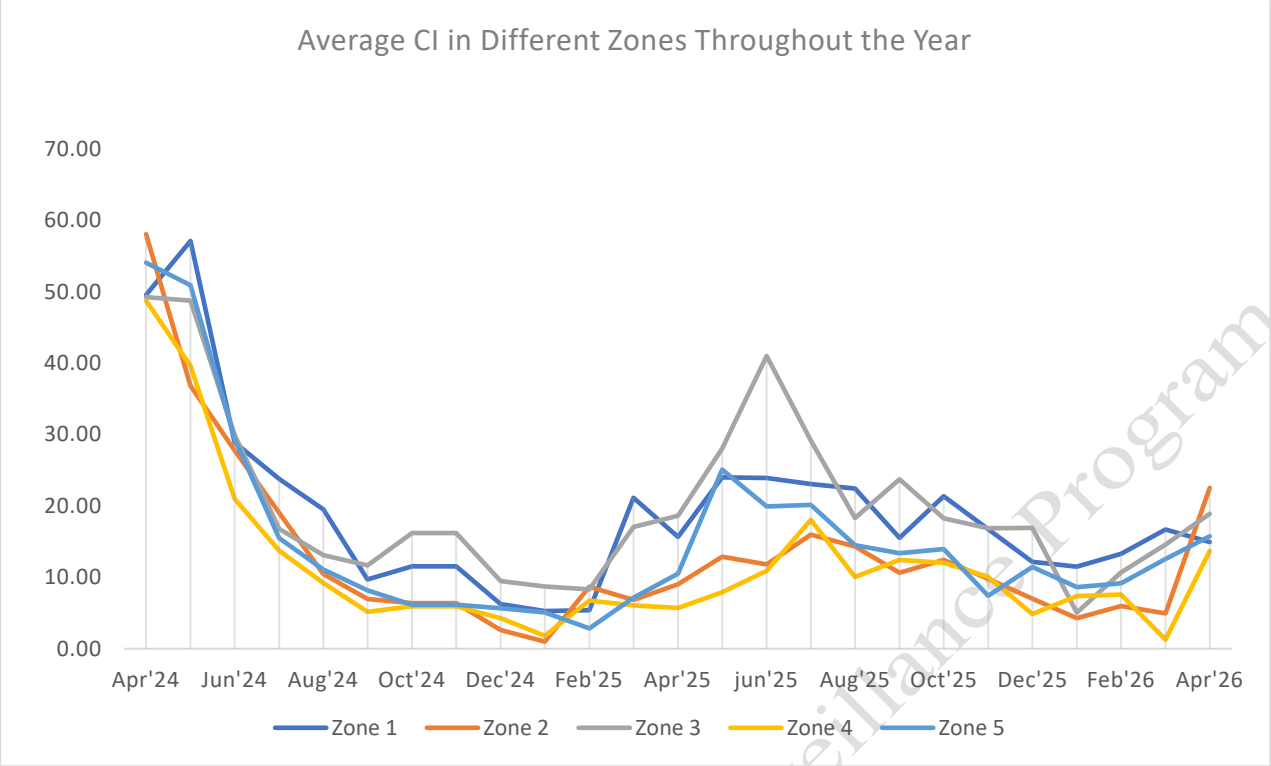


Fig. 9: Container Index (CI) in Different Zones from Week 1 to Week 99 (May 2, 2024 - April 21, 2026)

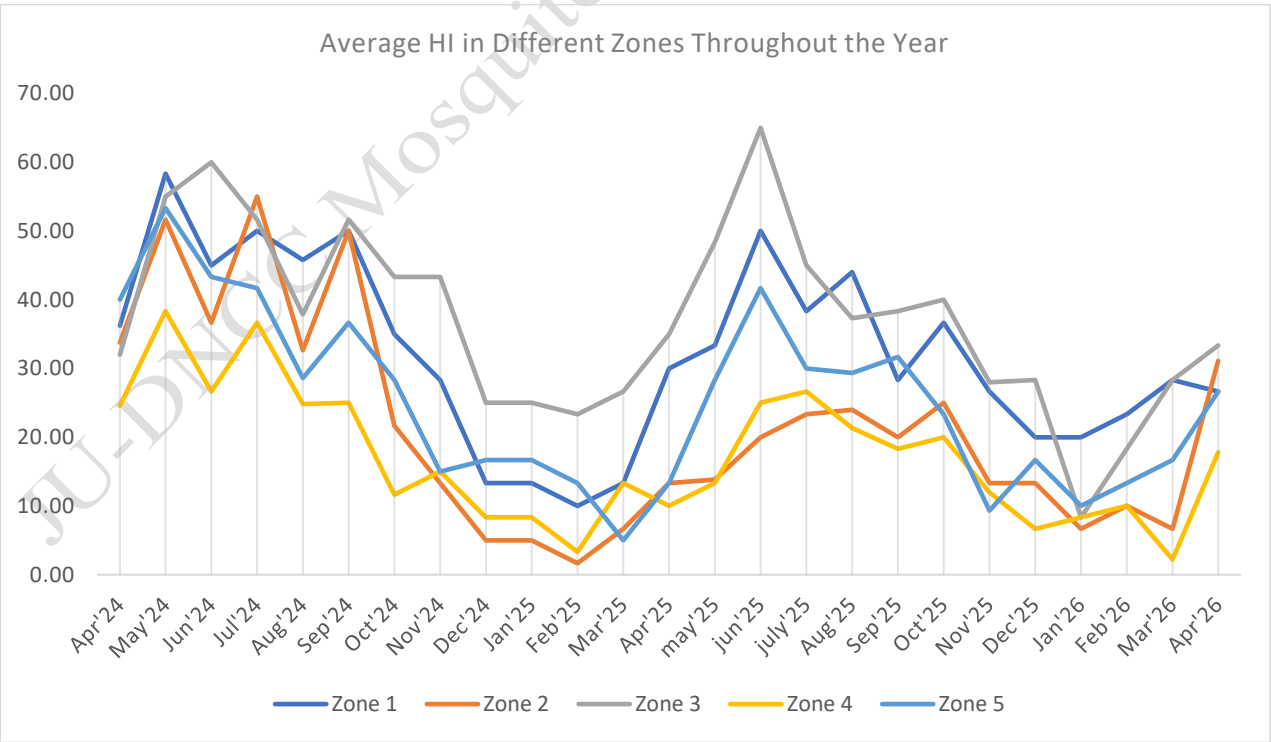


Fig. 10: House Index (HI) in Different Zones from Week 1 to Week 99 (May 2, 2024 - April 21, 2026)

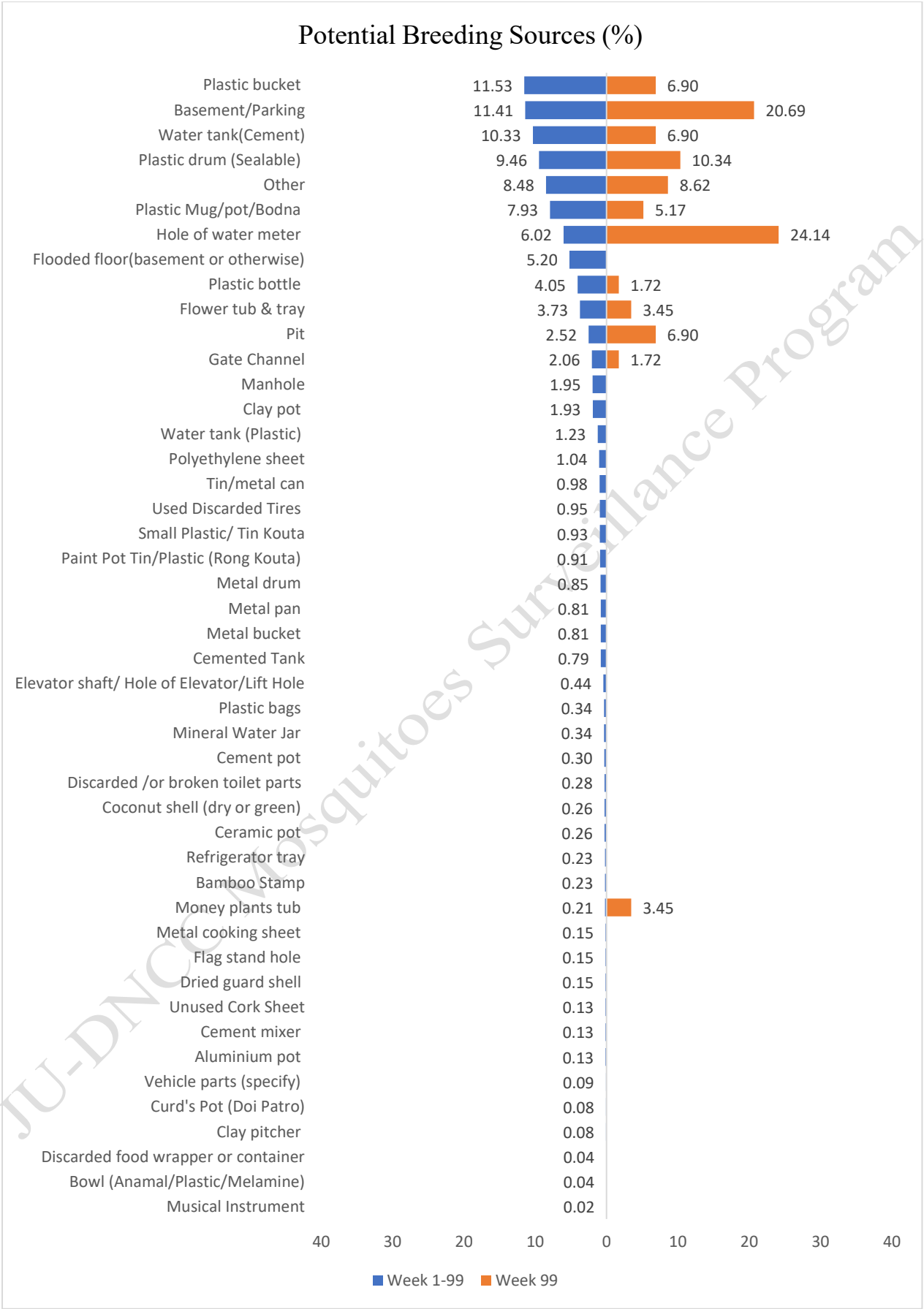


Fig. 11: Container Frequency for *Aedes* mosquitoes in Zones (1-5)

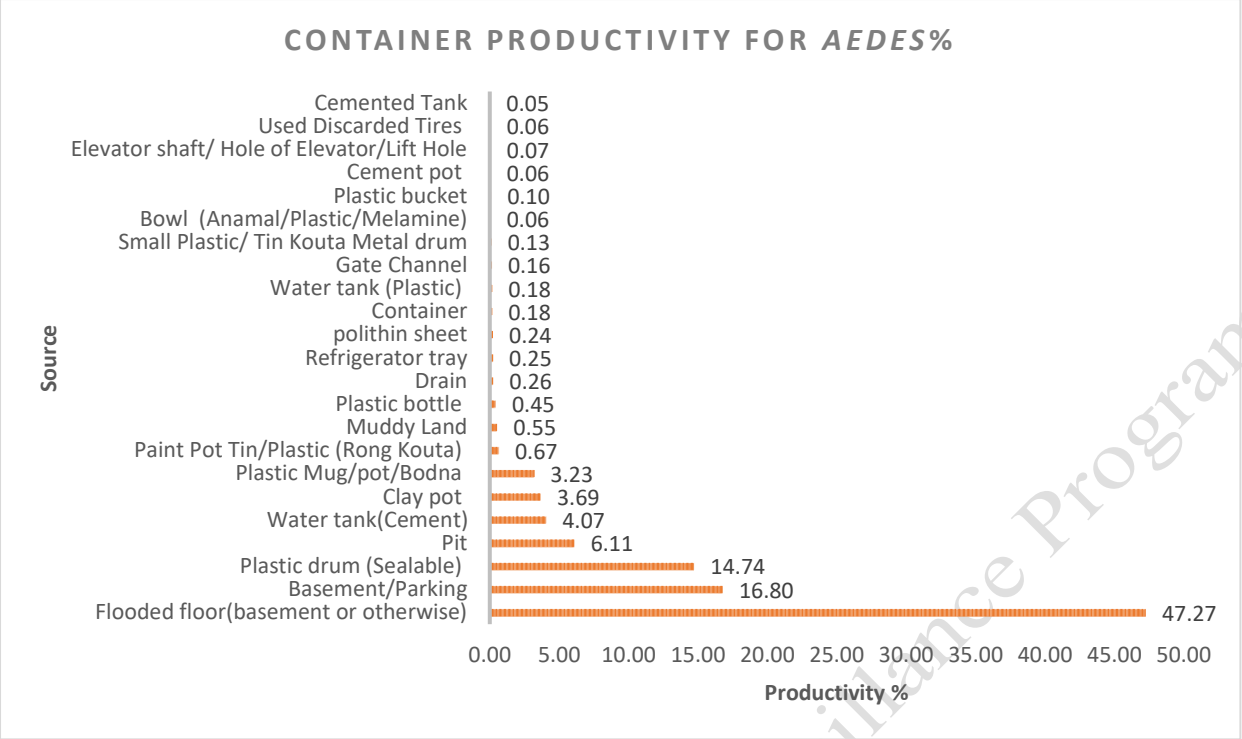


Fig. 12: Container Productivity of *Aedes* mosquito in DNCC from Week 1 to Week 99 (May 2, 2024 - April 21, 2026)

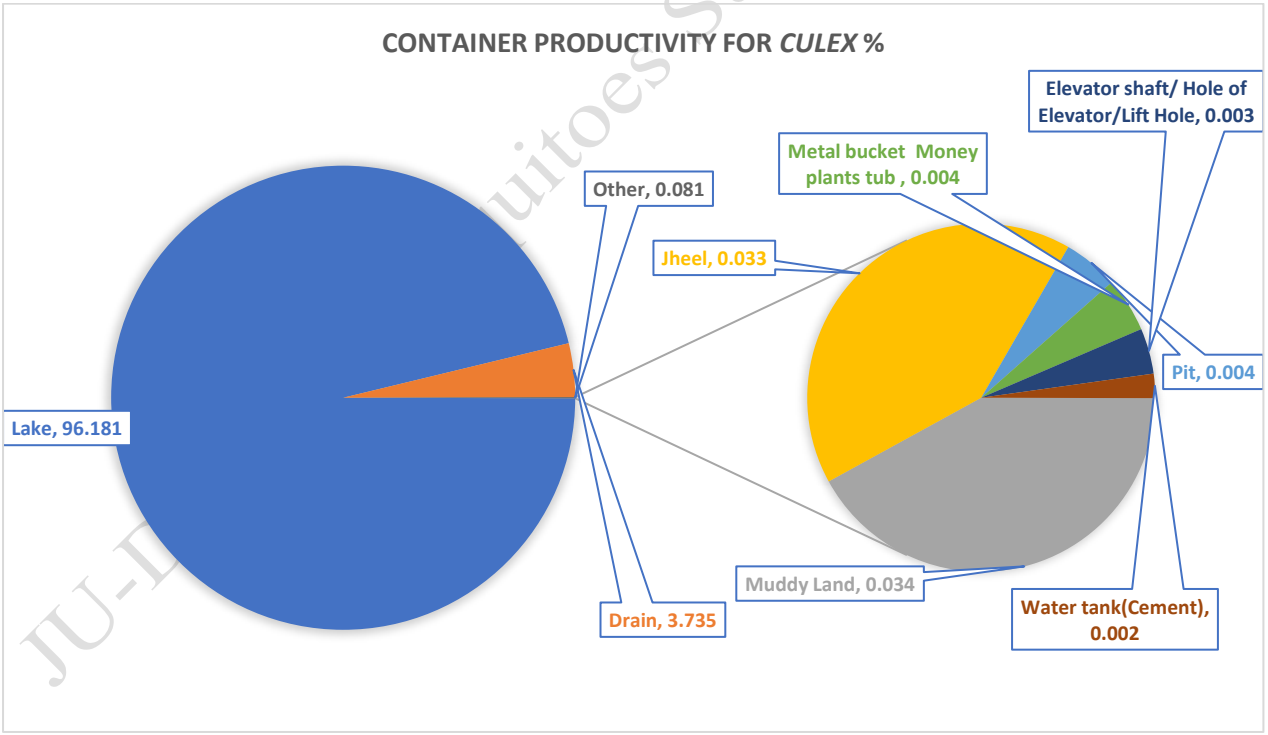


Fig. 13: Container Productivity of *Culex* mosquito in DNCC, from Week 1 to Week 99 (May 2, 2024 - April 21, 2026)

Table 6: Container Frequency & Probable potential Wet Container in zones (1-5) from Week 1 to Week 99 (May 2, 2024 - April 21, 2026)

Sources	+House	-WC	+WC	**Total WC**	% WC	% PWC
Plastic bucket	207	261	348	609	11.53	6.59
Basement/Parking	220	42	561	603	11.41	10.62
Water tank(Cement)	169	252	294	546	10.33	5.56
Plastic drum (Sealable)	235	78	422	500	9.46	7.99
Other	217	130	318	448	8.48	6.02
Plastic Mug/pot/Bodna	172	82	337	419	7.93	6.38
Hole of water meter	57	6	312	318	6.02	5.90
Flooded floor(basement or otherwise)	128	138	137	275	5.20	2.59
Plastic bottle	80	63	151	214	4.05	2.86
Flower tub & tray	74	25	172	197	3.73	3.26
Pit	65	22	111	133	2.52	2.10
Gate Channel	32	34	75	109	2.06	1.42
Manhole	56	29	74	103	1.95	1.40
Clay pot	83	11	91	102	1.93	1.72
Water tank (Plastic)	20	28	37	65	1.23	0.70
Polyethylene sheet	34	3	52	55	1.04	0.98
Tin/metal can	30	0	52	52	0.98	0.98
Used Discarded Tires	29	16	34	50	0.95	0.64
Small Plastic/ Tin Kouta	24	9	40	49	0.93	0.76
Paint Pot Tin/Plastic (Rong Kouta)	30	5	43	48	0.91	0.81
Metal drum	17	7	38	45	0.85	0.72
Metal bucket	21	5	38	43	0.81	0.72
Metal pan	18	3	40	43	0.81	0.76
Cemented Tank	22	13	29	42	0.79	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	0.26
Plastic bags	8	1	17	18	0.34	0.32
Cement pot	11	1	15	16	0.30	0.28
Discarded /or broken toilet parts	12	2	13	15	0.28	0.25
Ceramic pot	13	0	14	14	0.26	0.26
Coconut shell (dry or green)	4	0	14	14	0.26	0.26
Bamboo Stamp	9	0	12	12	0.23	0.23
Refrigerator tray	9	0	12	12	0.23	0.23
Money plants tub	8	0	11	11	0.21	0.21
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	0.09	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 99 (May 2, 2024 - April 21, 2026)

Containers	Percentage of Breeding Sources				
	Zone 01	Zone 02	Zone 03	Zone 04	Zone 05
Plastic bucket	1.99	2.02	2.23	2.88	2.40
Basement/Parking	2.86	1.74	2.97	1.12	2.73
Water tank(Cement)	1.32	1.68	1.34	3.01	2.97
Plastic drum (Sealable)	1.34	2.31	1.63	2.21	1.97
Other	2.76	1.48	2.31	0.70	1.23
Plastic Mug/pot/Bodna	1.42	1.44	1.51	2.18	1.38
Hole of water meter	0.74	1.14	0.28	1.97	1.89
Flooded floor(basement or otherwise)	1.34	1.15	0.87	0.57	1.27
Plastic bottle	0.53	0.95	0.59	1.06	0.93
Flower tub & tray	1.10	0.59	1.27	0.45	0.32
Pit	0.64	0.34	0.83	0.32	0.38
Gate Channel	0.79	0.19	0.59	0.08	0.42
Manhole	0.79	0.23	0.61	0.21	0.11
Clay pot	0.25	0.40	0.59	0.23	0.47
Water tank (Plastic)	0.00	0.78	0.17	0.15	0.13
Polyethylene sheet	0.30	0.28	0.21	0.17	0.08
Tin/metal can	0.28	0.26	0.19	0.19	0.06
Used Discarded Tires	0.36	0.26	0.17	0.08	0.08
Small Plastic/ Tin Kouta	0.25	0.17	0.26	0.11	0.13
Paint Pot Tin/Plastic (Rong Kouta)	0.21	0.09	0.26	0.21	0.13
Metal drum	0.17	0.09	0.21	0.28	0.09
Metal bucket	0.11	0.08	0.23	0.25	0.15
Metal pan	0.17	0.15	0.26	0.09	0.13
Cemented Tank	0.15	0.11	0.19	0.23	0.11
Elevator shaft/ Hole of Elevator/Lift Hole	0.19	0.09	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	0.09
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	0.09
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	0.06	0.00	0.06
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
Plastic bucket	1.99	2.02	2.23	2.88	2.40

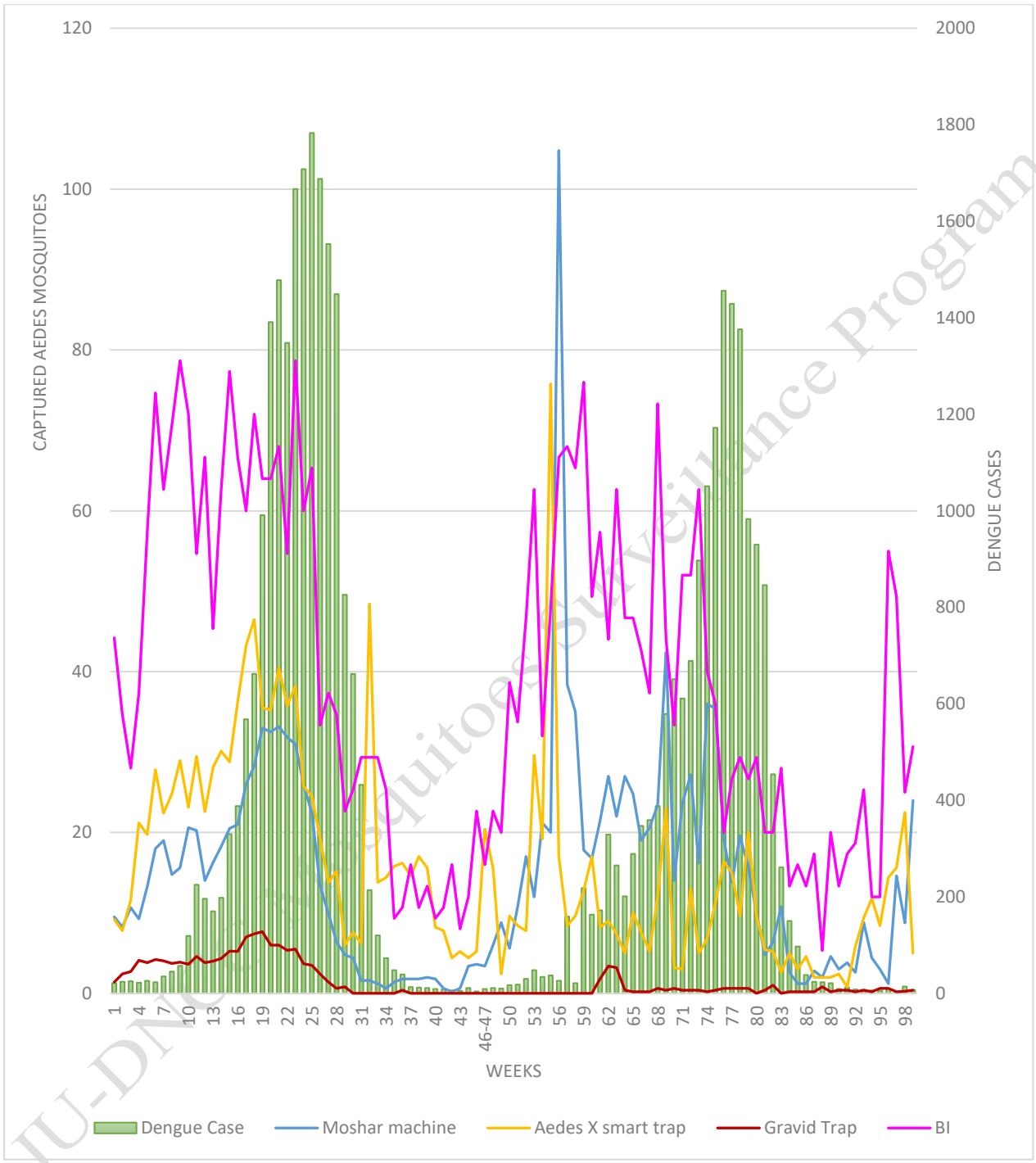


Fig. 14: Correlation between Dengue Cases and *Aedes* Mosquitoes Captured by per Moshar Machine CO_2 traps, Aedes X smart traps, and Gravid traps

NB: DNCC dengue cases only

Photographs of Mosquitoes Surveillance

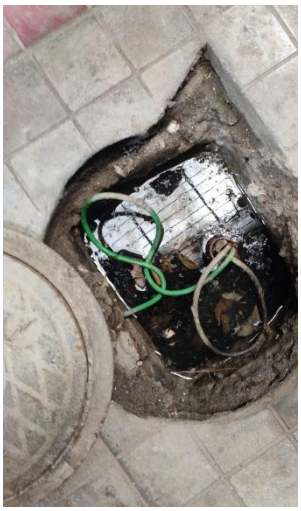








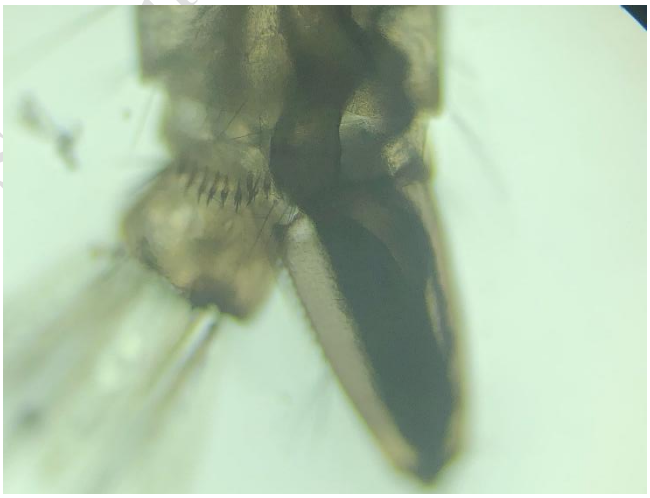
Samples Collection from Field






Samples Processing and Identification



Comments:

The mosquito density is increasing and the dengue cases declining rapidly. The Breteau Index (BI) is increased in week 99. 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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