

CONTROLLING OFFICER'S REPLY**EEB(F)069****(Question Serial No. 1843)**Head: (49) Food and Environmental Hygiene DepartmentSubhead (No. & title): (-) Not specifiedProgramme: (1) Food Safety and Public HealthControlling Officer: Director of Food and Environmental Hygiene (Ms Irene YOUNG)Director of Bureau: Secretary for Environment and EcologyQuestion:

As mentioned in the Estimates, one of the aims of the Food and Environmental Hygiene Department is “to safeguard public health through effective pest control”. However, a number of cases of human infection by rat Hepatitis E virus have been reported in recent years. In this connection, please advise this Committee of the following:

1. What were the respective numbers of the Department’s operations by way of poisonous baiting, trapping or application of new technologies such as “rodent trapping devices driven by pressurised gas”, “night vision cameras” and “thermal imaging cameras” in the past 3 years?
2. How much manpower and funding did the Department put into research and trial of rodent control with new technologies in the past 3 years?
3. There were views that the new technologies previously applied by the Government for rodent control were ineffective, mainly because the devices such as “night vision cameras” and “thermal imaging cameras” were just for detection of rodent activities, instead of for rodent catching or disinfection. Will the Department shift the focus of application of new technologies to new technological devices for rodent catching or disinfection, with a view to enhancing the effectiveness of anti-rodent work?

Asked by: Hon CHAN Hoi-yan (LegCo internal reference no.: 28)Reply:

1. The number of poison treatments of rodent infestation conducted in building blocks and the number of rodent trappings used by the Food and Environmental Hygiene Department in the past 3 years (2020 to 2022) are tabulated as follows:

Item	2020	2021	2022
Number of poison treatments of rodent infestation in building blocks	100 101	109 685	113 083
Number of rodent trappings	81 830	86 164	78 148

Due to the unsatisfactory anti-rodent effects demonstrated by “rodent trapping devices driven by pressurised gas” in previous tests and the lower protection of privacy offered by “night vision cameras” in comparison to “thermal imaging cameras”, the Department did not use “rodent trapping devices driven by pressurised gas” and “night vision cameras” in the past 3 years. “Thermal imaging cameras” with artificial intelligence analytical function will be used at different locations in the territory to help pest control staff obtain a clearer picture of rodents’ activities and their dispersal routes. Visual data collected at different points of time will be analysed to devise more targeted rodent prevention and control strategies.

2. The new methods and technologies tried out by the Department for rodent control in the past 3 years (2020-21 to 2022-23), their effectiveness and the expenditure involved are tabulated as follows.

Rodent control method/technology	Effectiveness	Expenditure		
		2020-21	2021-22	2022-23
New design snap trap	The new design snap trap was tested in 5 districts and 6 markets between January and June 2020. Test results showed that it was effective in catching rodents. The Department has introduced the use of the new design snap trap in its regular anti-rodent work.	About \$3,000	No breakdown is available	No breakdown is available
Thermal imaging camera surveillance system	The Department conducted trials on thermal imaging cameras with artificial intelligence analytical function in 2020 and found it effective in facilitating objective assessment of rodent infestation situation. The equipment is widely employed currently.	About \$3.96 million	About \$2.39 million	About \$3.89 million

Rodent control method/technology	Effectiveness	Expenditure		
		2020-21	2021-22	2022-23
Placing poisonous baits in a T-shaped bait box	The bait box was tested between October and November 2020. Test results showed that the T-shaped bait box was more effective than ordinary rectangular bait boxes in attracting rodents to enter and consume the baits. The equipment is widely employed currently.	About \$20,000	-	About \$580,000
Alcohol rodent trapping device	The Department has conducted trials progressively on alcohol rodent trapping devices in public markets and refuse collection points since October 2022. The initial results are positive. The Department will consider the introduction of alcohol rodent trapping devices in other suitable places under its management.	-	-	About \$380,000
Glue trap	The Department has tried out the application of glue traps in public markets with more serious rodent infestation as an additional measure for rodent disinfestation since	-	-	About \$630,000

Rodent control method/technology	Effectiveness	Expenditure		
		2020-21	2021-22	2022-23
	November 2022. The initial results are positive. Further trials of the equipment are being conducted in 11 markets.			

As research and trial of new anti-rodent technologies is part of the Department's normal pest control services, the Department does not keep a breakdown of the manpower involved.

3. Effective rodent control requires an accurate assessment of rodent activities and an array of anti-rodent methods. Apart from widely adopting T-shaped bait boxes and trying out new anti-rodent tools, such as alcohol rodent trapping device, the Department will continue to keep abreast of market information, remain open-minded, and actively consider introducing new technologies, equipment or methods which are found suitable for enhancing the effectiveness of rodent control work at different levels.

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