LCQ9: Pest problem of Phauda flammans

Following is a question by the Hon Kenneth Lau and a written reply by the Secretary for Development, Mr Michael Wong, in the Legislative Council today (June 23):

Question:

It has been reported that Ficus spp. trees account for one fourth of the trees planted for greening in Hong Kong, and since 2018, such trees in Northwest New Territories have been suffering severely from attacks by Phauda flammans. Such insects chew up lots of leaves of Chinese banyan and strip the trees bare, as well as cause damages to the trees' structure and health. When the trees or branches wither and fall, the lives of members of the public may be endangered. It is learnt that such pest problem has spread to areas around Tai Po, causing serious damages to the Wishing Tree in Lam Tsuen as well as the trees in some villages and private residences. In this connection, will the Government inform this Council:

(1) of the number of trees attacked by Phauda flammans in the past five years, according to the records of the Tree Management Office, together with a breakdown by District Council district; whether it has regularly deployed staff to check the conditions of the trees across the territory (in particular the Wishing Tree in Lam Tsuen);

(2) whether it has studied the causes for the Phauda flammans pest problem spreading rapidly in Hong Kong in the past few years and if such insects have become a major tree pest in Hong Kong; if it has studied, of the details; and

(3) whether it has formulated guidelines on the ways of handling when members of the public discover that the trees in their villages and residences are under attacks by Phauda flammans; of the prevention and control methods targeting at such insects to curb the continuous spread of the pest problem?

Reply:

President,

The Government is committed to the proper management of tree assets to ensure healthy tree growth and with safeguarding public safety as the prime objective. In respect of the three-part question raised by the Hon Kenneth Lau, our consolidated reply, upon consultation with relevant departments, is as follows:

(1) The Phauda flammans larvae (larvae) feed on leaves to survive, which is commonly found in Ficus trees. This natural phenomenon has been observed by tree management departments from time to time during their routine tree maintenance. The situation became more apparent in the summer of last year, and the number of infested trees this year has increased as compared to that of the previous year, mainly concentrated in the New Territories. The appearance of Ficus trees affected by larvae has deteriorated due to defoliation, but the infestation did not have a serious impact on the overall health and structural conditions of the infested trees. Around 2 500 Ficus trees were affected by the larvae this year, accounting for around 0.25 per cent of the total number of trees in areas of high pedestrian and vehicular traffic flow in the territory, and their distribution in various districts is tabulated below. The Government does not have figures of infested trees in the past five years.

District	Number of infested Ficus trees
Kowloon City District	5
Yau Tsim Mong District	17
Islands District	3
Kwai Tsing District	7
North District	395
Tai Po District	85
Tsuen Wan District	22
Tuen Mun District	280
Yuen Long District	1749
Total	2563

To effectively prevent the spread of the infestation and the possible impact to the Old and Valuable Trees (OVTs), the tree management departments have strengthened their regular inspection to monitor the affected trees in various districts, and adjusted the relevant measures having regard to different stages of the life cycle of the moth. At the same time, the Inspection Squad of the Tree Management Office under the Development Bureau (DEVB) and the tree management departments have increased the frequency of inspection to all the 283 Ficus OVTs as well as the trees nearby from halfyearly under general situation to weekly, and the Wishing Tree at Lam Tsuen is also covered by this special inspection arrangement. Apart from enhanced monitoring, departments also adopted preventive maintenance work including watering, applying fertiliser and soil management, with a view to improving the growing environment for trees. The pupae inside tree bark, crevices in roots, top soil and fallen leaves were also cleared weekly to prevent the adults from emerging.

(2) and (3) The DEVB has contacted the expert consultant in Guangdong, the relevant department in Shenzhen, local entomologists and ecologists, and conducted technical exchange on the surveillance, prevention and control measures of the Phauda flammans. It was noted that the infestation also happened in Shenzhen. It is estimated that the increase in Phauda flammans larval population last year might be due to the persistent high temperature and low rainfall.

To ensure the effective implementation of integrated pest management, specific measures should be adopted having regard to different stages of the life cycle of the insect (eggs, larvae, pupae and adults), followed by monitoring, evaluating the effectiveness of the control measures and making adjustments whenever necessary. According to the control and monitoring results last year and early this year, departments have taken appropriate control measures according to the infestation extent of the trees, their surrounding environment, as well as different stages of the life cycle of the insect, including:

(i) To spray soap water on affected tree crown or insecticide on tree trunk to reduce the larval population;
(ii) To wrap tree trunk with bamboo/straw mat or hessian to trap the active larvae; and
(iii) To step up clearance of pupae inside tree bark, crevices in roots, top soil and fallen leaves to slow down the emergence of adults in the next stage.

Besides, departments are trying to introduce new control techniques including soil injection, which allows trees taking up insecticide from roots up to the leaves and kills the larvae which feed on the leaves. This technique will alleviate the impact to nearby residents arising from the spraying of insecticide and the insecticide will not adversely affect tree health.

The DEVB will promote the monitoring and pest control methods to the arboriculture industry, practitioners and the public. Members of the public who notice mass larval infestation in their maintained Ficus trees may report to the Tree Management Office of DEVB, and we will provide information on the appropriate control measures to combat the pest together.