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# AVA VISION

Issue 3/2018

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## NEW METHOD TO CONTROL DBM

AVA introduces an effective method for the control of the Diamondback Moth (DBM).



The DBM is one of the most destructive insect pests of brassica crops such as *cai xin*, *xiao bai cai*, *gai lan*, and watercress throughout the world. It is difficult to control and eradicate, and is resistant to many types of pesticides.

To help local farms manage the DBM, AVA initiated a six-month programme from 2017 to 2018 to encourage vegetable farmers to use DBM pheromone traps. This trap uses pheromones to lure DBMs and contains a sticky surface to catch the DBMs, thereby reducing the population of DBM in the farm.

Over 6,000 of such traps were distributed to local farmers who participated in the programme. Following the distribution, AVA officers monitored the use of the trap, provided advice on its installation and construction, and worked with farmers to troubleshoot any issue encountered.

Participating farmers reported a decrease in DBM damage and up to 50% reduction in the use of pesticides. Many of them were also keen to continue using the DBM pheromone traps as part of their integrated DBM management programme.

*Over 6,000 of such traps were distributed to local farmers who participated in the programme. Participating farmers reported a decrease in DBM damage and up to 50% reduction in the use of pesticides.*

■ A local vegetable farm where DBM traps are being used.

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■ An AVA officer (holding yellow cardboards) demonstrates the construction of a DBM pheromone trap during a training session for local vegetable farm staff.

With the keen participation from farmers and good outcomes obtained, AVA further improved the pheromone trap by adding food attractants to it. To test the efficacy of this pheromone-cum-food trap, a trial was conducted in a farm, and the results were encouraging. Further trials are being conducted in more farms with varying population densities of DBM.

Besides DBMs, there are also other important plant pests that affect crop growth. A survey of pests is currently being carried out in local vegetable farms. When completed, the survey results will form a basis for the judicious use of pesticides and help us to better understand the plant pest challenges at hand.

■ (Top) A DBM sticky trap that has been impregnated with pheromones.

## WATCHING OVER LOCAL VEGETABLE FARMS

Pang Jing Ren is part of a surveillance, inspection, and monitoring team that ensures local vegetable farms are producing safe and pest-free crops at an optimum level.



### Question: What exactly do you do at work?

*Senior Executive Manager, Plant Section, Agri Establishment Regulation Group, AVA:*

As part of AVA's surveillance and inspection programme for vegetable farms in Singapore, my teammates and I inspect these farms to ensure compliance with farm licensing conditions, as well as food safety and plant health requirements. Samples are also collected for laboratory testing, to ensure these vegetables are safe for consumption and keep pest infection at bay. At the same time, we track important farm data such as productivity figures and pesticide usage.

### Tell us about a memorable project you worked on.

In 2016, there was a Diamondback Moth (DBM) outbreak in several local vegetable farms. Despite our heavy workload, my team took on the additional role to assist the affected farmers. We deployed DBM pheromone traps to these farmers, and collected the traps on a weekly basis to monitor the effectiveness of the traps. Our hard work paid off. The traps developed by AVA worked well and the pest problems were substantially alleviated.

In addition, I was in a taskforce that worked closely with a local farm to resolve its pest problem. The taskforce helped to monitor and facilitate the farm's pesticide regime via the rotational use of pesticides. Vegetables were also sampled and tested during production to ensure pesticide residue levels were within safe limits. It was an invaluable experience for me to work alongside the farmer and AVA's senior officers in the taskforce.

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### In what ways do you work with other AVA Groups, public agencies, and AVA's customers?

We conduct joint-investigations with other public agencies including the Singapore Land Authority, Ministry of Manpower, and National Environment Agency on various farm issues. For example, we work together to ensure that farms do not use their premises for illegal purposes such as earthworks or workers' quarters. We also look out for any potential surface run-off discharge that may enter our public drains.



### Share some less known facts about your job.

When I tell people that AVA inspects vegetable farms, most automatically assume that I am referring to the traditional outdoor farms. What many do not know is that we are beginning to see more hi-tech indoor farms in Singapore, and that we conduct inspection and sampling at these farms too!

### What do you find enjoyable or satisfying about your work?

My work is satisfying because we are helping to ensure that our locally produced vegetables are safe for consumption. I also derive job satisfaction in the way my role contributes to food supply resilience in Singapore. Our assistance and expertise helps farmers to control plant pests, which can adversely impact farm productivity.

■ (Top) Jing Ren and then Senior Minister of State for National Department Dr Koh Poh Koon (right) during a farm visit to engage with local farmers and better understand their concerns.

■ (Bottom) Jing Ren inspecting an indoor vegetable farm.

## AVA WINS MINISTER'S TEAM AWARD FOR ASSISTANCE TO LOCAL FARMS HIT BY STORM

On 30 March 2018, an unusually severe storm damaged four farm facilities in the Murai area. Chew's Agriculture was the worst hit, with a number of its chicken sheds completely or partially collapsed. Several government agencies including AVA, the Building and Construction Authority (BCA), National Parks Board (NParks), National Environment Agency (NEA), PUB Singapore's National Water Agency, and Singapore Land Authority (SLA), came together to facilitate the swift recovery of the worst-affected farms, and to prevent animal health, public health, or food safety issues.

Upon receiving news of the damage, AVA officers immediately visited the affected farms the same evening. The next morning, a recovery plan was set in motion. Then Senior Minister of State for National Development Dr Koh Poh Koon, along with AVA CEO Mr Lim Kok Thai and other members of the AVA leadership team, also visited the farms to assess the situation. About 40 AVA officers worked tirelessly, even during weekends, to assist the farms in their recovery efforts, which included rounding-up chickens that escaped from Chew's Agriculture's collapsed sheds. AVA, BCA, and SLA also assisted Chew's Agriculture to have the building closure order on its egg processing plant lifted quickly, so as to minimise any disruption to the farm's egg production.

In recognition of our collective efforts, AVA and these agencies received the Ministry of National Development's (MND) Minister's Team Award 2018 on 8 August 2018. The award recognises the work of MND agencies whose joint projects showed exceptional effort in innovation, collaboration, and public service delivery.



*“Everyone was in constant communication with each other and updated one another on new developments. It was great that all the agencies were able to pull together our various areas of expertise to assist the farms – AVA in terms of animal health and welfare, BCA in terms of safety of the farm structures, for example.”*

**Dr Han Zi Yang, Senior Veterinarian (Animal Section),  
Agri Establishment Regulation Group, AVA**

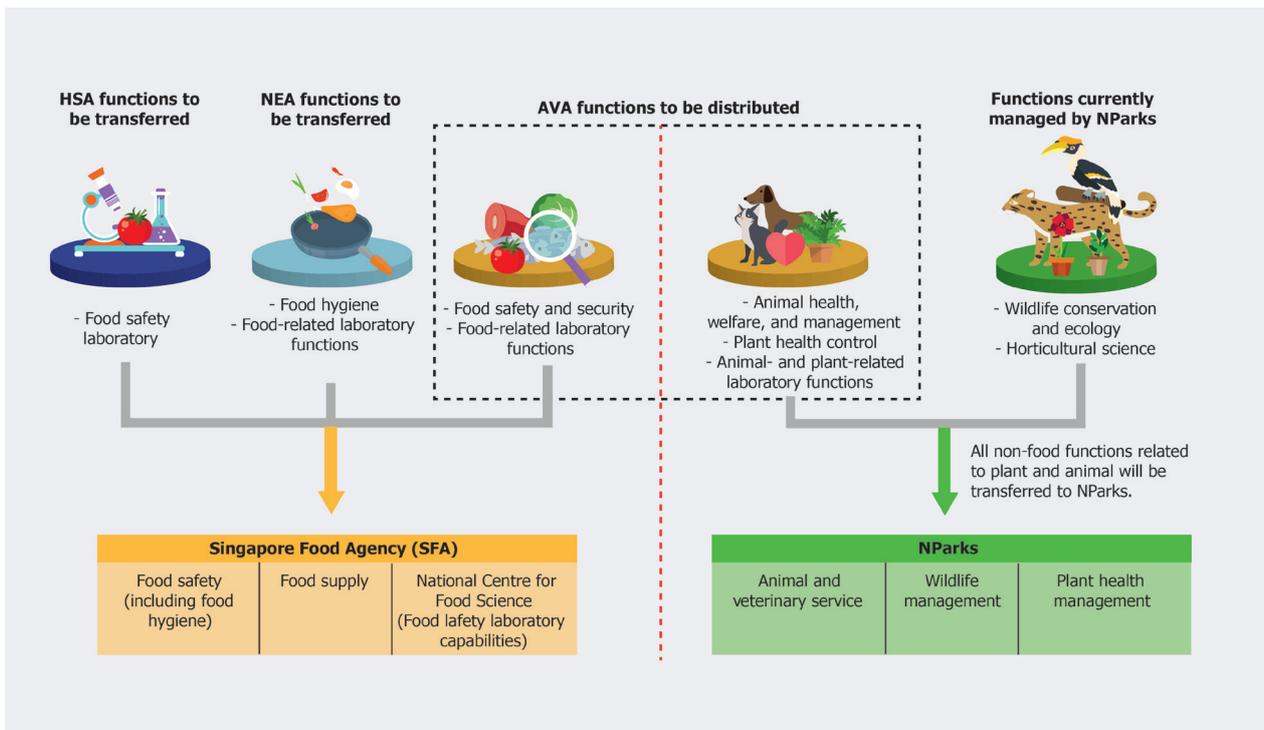


## NEW SINGAPORE FOOD AGENCY TO OVERSEE FOOD SAFETY AND SECURITY

From 1 April 2019, all food-related functions currently under AVA, the Health Sciences Authority (HSA), and National Environment Agency (NEA) will be consolidated into a new statutory board called the Singapore Food Agency (SFA).

In parallel, all plant and animal matters that are unrelated to food will be transferred from AVA to NParks, which will become the lead agency for animal and wildlife management, as well as animal and plant health.

In the interim, AVA, NEA, HSA, and NParks will continue to carry out their existing functions.



## Lead Agency to Develop Food Supply and Industry – “From Farm to Fork”

SFA, to be formed under the Ministry of the Environment and Water Resources (MEWR), will enhance regulatory oversight over all food-related matters from farm to fork and further strengthen our food safety regime. This will also facilitate more business-friendly regulations. For example, by harmonising licensing standards and combining existing licenses for farmers, food manufacturers, food retailers, and food service operators, businesses will be able to adapt and transform their business models seamlessly and look at new ways to grow their operations.

As a dedicated agency, SFA will strengthen the management of food-borne disease outbreaks, through tighter coordination of responses to food-related issues, including product tracing and recall, and engagement with various stakeholders and the public. This enables the SFA to address lapses more quickly and more holistically, and streamline public feedback to one point of contact.

To deepen our capabilities in food safety, a National Centre for Food Science (NCFS) will be established under SFA to consolidate the food laboratory capabilities of the three agencies under one roof. The NCFS will bring together key competencies in food diagnostics, and research and development in food safety.

## FOOD SAFETY EXCELLENCE AWARDS 2018

The annual AVA Food Safety Awards Night recognises food companies for their sustained efforts in upholding stringent food safety standards. It is also a platform for AVA to acknowledge our Food Safety Partners who have played an active role in food safety public education.



Scan to view the list of recipients for the AVA Food Safety Excellence Awards 2018

At the 15th Food Safety Awards Night held on 20 July 2018, Guest-of-Honour Senior Parliamentary Secretary for Home Affairs and National Development Ms Sun Xueling presented 4 Platinum, 7 Gold, 9 Silver, and 9 Bronze awards, as well as 145 Certificates of Commendation, to deserving local food companies with sustained A-grading. In addition, we also recognised the efforts of three Food Safety Partners who had their partnership statuses renewed.



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## City in a Garden

Given our dense urban living environment, there is a need to carefully manage the harmonious co-existence of people with wildlife and domestic animals. The transfer of AVA's plant- and animal-related functions will allow NParks to provide one-stop service to Singaporeans and stakeholders on animal management and animal welfare issues, to manage human-animal interactions, and to improve the detection of and response to zoonotic diseases.

A new Animal and Veterinary Service (AVS) will be formed under NParks as the main touch-point on animal-related issues for pet owners, pet businesses, and animal welfare groups. It will also take on AVA's current role as the first responder for animal-related feedback, and continue to uphold high standards in animal welfare and health.

Also, by combining NParks' expertise in wildlife conservation and horticultural science with AVA's capabilities in animal health, plant health, and animal management, the efforts to conserve Singapore's natural heritage will be more holistic.



## SG FARMERS' MARKET WOOS THE HEARTLANDERS

AVA and the Singapore Agro-Food Enterprises Federation (SAFEF) co-organised two SG Farmers' Market events at Hillion mall (Bukit Panjang) in July 2018 and at myVillage mall (Serangoon Garden) in September 2018.

At Hillion mall, 21 farmers showcased their locally grown vegetables, fish, seafood, eggs, and mushrooms. A few farms participated in the event for the first time, selling produce such as bean sprouts, soybean sprouts, sweet cherry tomatoes, mizuna, lettuce, pak choy, kale, and microgreens.

Specialties such as pesto sauce, fish porridge, fish wraps, as well as ice cream and muffins made with Brazilian Spinach, were also featured at both events.



### Join us at the next Farmers' Market

28 October 2018  
(Car-free weekend)

8am - 12 noon

Esplanade Park, Connaught Drive

Shop for the freshest home-grown leafy vegetables, pasteurised eggs, fish, and many more. Come meet and interact with Singapore's farmers, eat fresh, and support local produce!



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