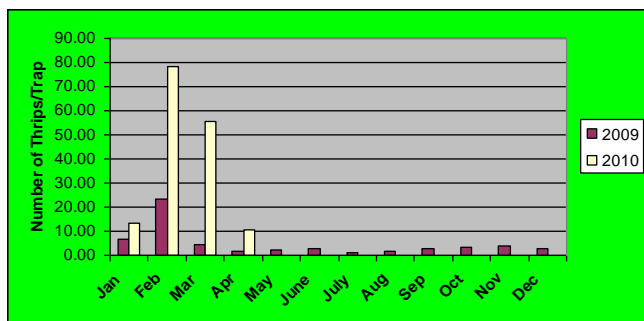
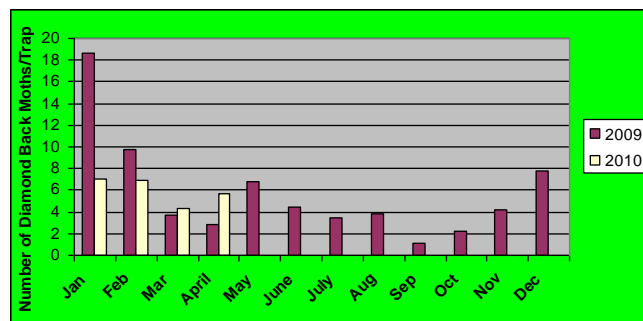


Thrips infestation on Orchids



Comments: The overall average thrips populations showed a steep decline in this month which is due to the farmers taking up adequate plant protection measures including rotation of chemicals and use of correct dosage to get the maximum kill. Secondly the prolonged dry weather conditions also improved.

Diamond Back Moth infestation on Vegetables



Comments: The average DBM population is slightly on the rise in this month as compared with the same month last year. This was due to one farm recording a higher count. The farmer did not take up adequate plant protection measures and he was advised accordingly.

A NEW ROOT-KNOT NEMATODE- *MELOIDOGYNE ENTEROLOBII* IN SINGAPORE

A root knot nematode identified as *Meloidogyne enterolobii* Yang & Eisenback (Syn. *M. mayaguensis* Rammah & Hirschmann) (Nematoda:Tylenchida: Meloidogynidae) has been found affecting *Cactus* spp. The nematode is considered as a pest of quarantine importance in Europe and was detected for the first time in Singapore.

M. enterolobii was originally described in 1983 from the population isolated from pacara earpod tree (*Enterolobium consortisiliquum*) in China. The species being tropical and sub-tropical in nature was reportedly distributed in Africa (Burkina Faso, Côte d'Ivoire, Malawi, Senegal, South Africa), Asia (China Hainan, Guangdong), North America (Florida, USA), Central America and the Caribbean (Cuba, Martinique, Puerto Rico, Trinidad and Tobago), and South America (Brazil, Venezuela). Finally, it was detected in greenhouses in France and Switzerland.

It is considered as one of the most aggressive root-knot nematodes mainly for its high reproductive rate, induction of large galls and wide host range. The species can infest economically important crops such as pepper, watermelon, coffee, soybean, sweet potato, tomato, tobacco, bean, guava, beet, cabbage, broccoli, celery, parsley, aubergine and ornamental plants such as *Ajuga*, *Brugmansia*, *Clerodendron* and *Tiobouchina*. *Cactus*, *Ficus*, *Syngonium*, *Rosa* and *Vitis* can also be host plants of this nematode. Symptoms of infestation may range from chlorosis, defoliations, wilt (Fig1.), stunted growth and yield reduction. The presence of small to large fleshy galls on the root systems (Fig.2) is the primary symptom associated with the infection of this nematode. The mature male and female nematodes are shown as Fig.3.



Fig 1. Chlorosis and wilting caused by *M. enterolobii* infection in cactus



Fig.2. Root galls or root-knots in cactus

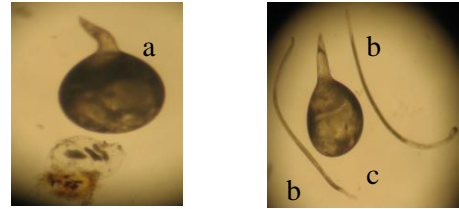


Fig.3. *M. enterolobii* (a) Mature female, (b) males (c) immature female

Pest Interceptions from Importing Countries (April 2010)

AVA was notified of four pest interceptions from exported aquatic plants/orchid cut flowers/foiliages consignments for April 2010.

Commodity = Orchid cut flowers
 Pest Intercepted = Comb Footed spiders
 Intercepting Country = Australia

Commodity: *Cryptocoryne* sp
 Pest Intercepted: *Hirschmaniella* sp
 Intercepting Country: France

Commodity = *Chrysalidocarpus* sp
 Pest Intercepted = *Phomopsis* sp
 Intercepting Country = USA

Commodity = *Aranthera* sp and *Alpinia* sp
 Pest Intercepted: *Thrips palmi*
 Intercepting Country: USA

Exporters are advised to implement pest control management on farm with blue sticky traps and insecticide applications (rotation of insecticides and correct dosage will help in reducing the insect resistance) to control thrips infestations. Pre-shipment fungicidal/insecticidal dipping treatments will further help in reducing the viability of fungal pathogens and increase in the killing of spiders respectively on foliages. In addition, apply nematicides in the aquarium beds to control the nematodes

CONTACT US

Please report any unusual occurrence of pests and diseases (new or severe occurrence) to Plant Health Laboratories, AVA. It would help to protect our plant industry and the garden city from new invasive pests or diseases. You can report your observations through:

Email : AVA_Planthealth@ava.gov.sg or Telephone: 63165168 or 188 or Fax: 63161090.

Please provide the location, plant hosts attacked and suspected pests or diseases to our officers to follow-up and confirm the situation if required.

Visit us at:

<http://www.ava.gov.sg/AgricultureFisheriesSector/PlantHealthServices/PlantHealthLabServices/index.htm>