



bscrl

The **Brown Marmorated Stinkbug** (*Halyomorpha halys*) is a serious pest of agricultural crops around the world. It is yet to be reported from Cyprus but keep your eyes open!



Chris Tucker/
R.D.Vector

Alien insects as hitchhikers on ornamental plants

Globalization and international trade has led to the translocation of species across the globe, outside their native range. These species are also called 'alien'.

What can we do?

- Do not plant ornamentals and other alien plants in nature.
- Choose to buy and cultivate native plants rather than aliens.
- Look out for and remove any insects on plants you buy for your garden.
- Some alien insects may also hide in your luggage. When travelling check your bags for insects or other unwanted passengers.
- Become a citizen scientist and record any insects you find on your garden and house plants.

To find out more about alien species please visit:



<https://ris-ky.info/cydas>



www.facebook.com/groups/RISKYCYPRUS



@RiskYAliens



Download the iNaturalist application for free and upload your observations to the platform.



Most alien species of plants have been introduced for agricultural, horticultural, ornamental or medicinal purposes. However, there are numerous cases of species introduced unintentionally.



Damage to a tomato crop caused by the Tomato Leaf Miner *Tuta absoluta* (inset)



As a result, many insect species have followed their host-plants to their introduced areas and many of these species have managed to establish, reproduce and spread.

O.S.Iam



We thank Defra Darwin Plus for funding this project on the Sovereign Base Areas of the Akrotiri, Episkopi and Dhekelia on Cyprus.

This leaflet was created by J. Demetriou, E. Koutsoukos, I. Angelidou, HE. Roy and A. Martinou. Funding from Darwin Plus Local (DPLR1_1049) and Darwin Plus (DPLUS 124, 200 and 202). Images sourced from Noun Project, Shutterstock and Unsplash.



Produced by Field Studies Council Publications

Let's learn more together about alien plants used as ornamentals and some of the insects that hitch a ride on them to new destinations!



Ornamental alien trees

Rodho



Sonali

Palm trees (*Phoenix* spp.)



Wonderisland

One of the largest weevils on Cyprus! Look out for its distinct black and red colour. Native to Asia, the **Red Palm Weevil** (*Rhynchophorus ferrugineus*) was first recorded from Cyprus in 2006. Its larvae develop inside the wood of palm trees and can lead to the death of the plant.



H.Wall

The **Palm Moth** (*Paysandisia archon*) is native to South America and was first recorded from Cyprus in 2008. Its larvae also develop inside the wood of palm trees and can lead to the death of the plant. Under its grey first pair of wings orange, black and white colours emerge!

The **Eucalyptus Gall-wasp** (*Ophelimus maskelli*) is native to Australia and was first recorded from Cyprus in 2021, although it was probably present on the island for decades. It inserts its eggs into *Eucalyptus* leaves creating conspicuous galls, which turn red as they mature. From these galls fully developed adults emerge.



A.N.Protasov

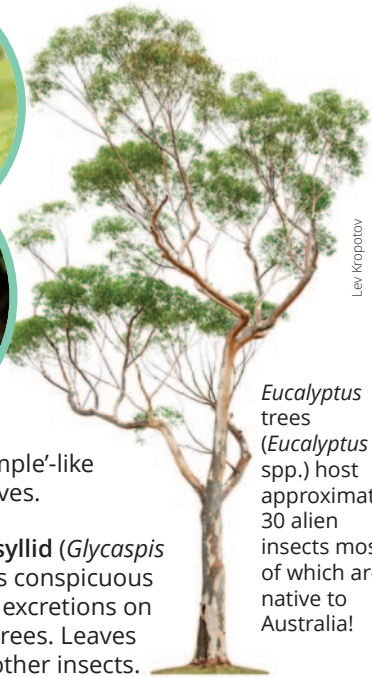


C.H.Weiss

A.N.Protasov

Look out for these 'pimple'-like galls on *Eucalyptus* leaves.

The **Red Gum Lerp Psyllid** (*Glycaspis brimblecombei*) creates conspicuous 'cones' made of sugary excretions on the leaves of *Eucalyptus* trees. Leaves become sticky and attract other insects.



Lev Kropotov

Eucalyptus trees (*Eucalyptus* spp.) host approximately 30 alien insects most of which are native to Australia!



Ficus microcarpa

Fruits (figs) growing on ornamental fig trees have been shown to host a variety of tiny wasps developing in the fruits, also called fig wasps. More than 15 different species have been found in Cyprus, native to Australia and Indomalaya.



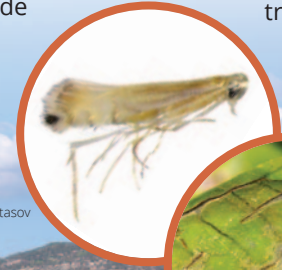
Young Sweet Ming



Tomasz Klejdysz

The **Mediterranean Fruit Fly** (*Ceratitis capitata*) is native to Africa is one of the most destructive pests of *Citrus* trees. It lays its eggs inside developing fruit. The developing larvae make the fruit inedible. Look out for the distinct reversed skull shape on its thorax!

The **Citrus Leaf Miner** (*Phyllocnistis citrella*) develops in the leaves of *Citrus* trees making distinct 'mines'. These affect the plants' growth.



A.N.Protasov



Roslak Natalia



Lemons, mandarins, oranges and other citrus species are important for the economy of Cyprus. Many alien insects affect their growth and fruit production.

Native and alien ornamental forest trees

The **Sycamore Seed Bug** (*Belonochilus numenius*) has not been detected in Cyprus but may arrive through the import of plane trees planted as ornamentals.



Coulanges



Sycamore (*Platanus orientalis*) Native

The **Sycamore Lace Bug** (*Corythucha ciliata*) is native to America and infests Sycamore trees in Europe. It may cause skin irritations to people (dermatosis). Although not detected in Cyprus, it is important to monitor its possible introduction to the island.



Recep Ozturk

Black locust (*Robinia pseudoacacia*)
Alien



Artem Stepanov



Aleks198

The **Black Locust Gall Midge** (*Obolodiplosis robiniae*) is a fly native to North America. It causes obvious curling of the leaves on the black locust.



Masayuki



Marco Maggesi

The **Oriental Chestnut Gall Wasp** (*Dryocosmus kuriphilus*) is native to Eastern Asia and forms galls on the leaves of chestnut trees. This reduces the trees' productivity and growth. Therefore, a beneficial parasitoid of the Oriental Chestnut Gall Wasp, *Torymus sinensis*, has been introduced to many European countries to act as a biological pest control.



Chestnut (*Castanea sativa*)
Alien



G.Svilen

Pine trees (*Pinus spp.*)
Both native and alien species

Ernie Cooper



The **Western Conifer Seed Bug** (*Leptoglossus occidentalis*) is native to America but has managed to invade most of Europe. In Cyprus it has been only recorded once in 2019 from the Paphos forest. More research on its spread and impacts are necessary.

Milan Seitler



Ornamental alien bushes and flowers

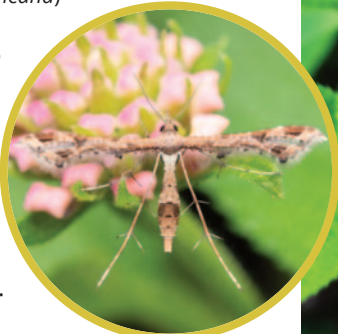


The Agave Weevil (*Scyphophorus acupunctatus*) develops inside the plant leading eventually to the death of the plant.

Jorge Ortiz

American Aloe (*Agave americana*)

The Lantana Plume Moth (*Lantanophaga pusillidactylus*) develops exclusively on lantana plants and lays its eggs on the flowers' bases. The developing larvae damage flower heads.



Reality Images



Common Lantana (*Lantana camara*)

Abrarul Haque

Silverleaf Nightshade (*Solanum elaeagnifolium*)



Kuttelvaserova Stuchelova

Look out for this striped 'tiger'-like black and orange insect. The Colorado Potato Beetle (*Leptinotarsa decemlineata*) is native to America and is a serious pest of plants of the genus *Solanum*, such as *S. elaeagnifolium* and the potato. Although not detected in Cyprus, it is important to monitor its possible introduction to protect economically important potato crops.

Potted plants



The transport of potted plants in nurseries and greenhouses may help the introduction and spread of alien insects.



Carmen Hauser



Keith Hider

A well-known case has been that of the Harlequin Ladybird (*Harmonia axyridis*), which was first intentionally introduced to Europe in greenhouses to control aphids. However, the ladybird managed to escape causing severe negative effects on native ladybirds and other insects. Although not detected from Cyprus yet it is important to monitor its possible introduction and spread.

The Geranium Bronze Butterfly (*Cacyreus marshalli*) has managed to spread throughout the Mediterranean developing inside *Geranium* and *Pelargonium* potted plants. Although not detected in Cyprus yet, it is important to monitor its possible introduction and spread.



Jesus Noguera



Tina He Gtor

Timothy Hales-Bennett



The soil in potted plants can host alien insects such as ants! At least six alien species are believed to have been introduced to the island in potted plants, including the Little Fire Ant (*Wasmannia auropunctata*), one of the world's worst invasive alien species.