

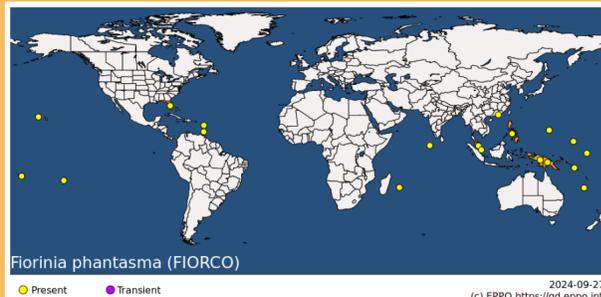
# BE AWARE!

## Phantasma scale - *Fiorinia phantasma*

### THE ORGANISM

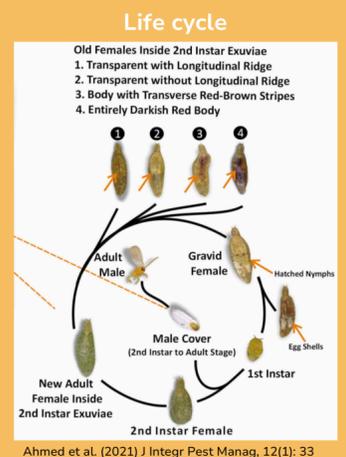


The Phantasma scale is an armored scale insect native to the Asian-Pacific region, but has spread to other parts of the world, including North America and the Caribbean.



It primarily affects ornamental and fruit trees, with a particular preference for palm species.

Adult female remain stationary and produce 1st Instars called crawlers, which are mobile and can spread to new plants. Crawlers can be carried by wind, animals or contaminated plant material and gardening tools. Adult males are winged and mobile but short-lived and do not feed.



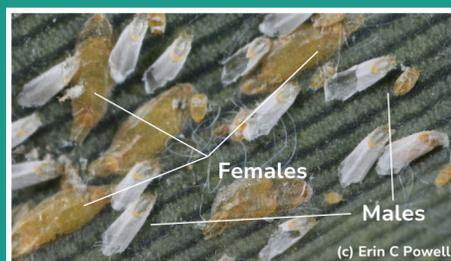
### HOW TO RECOGNISE IT ?

#### 1. APPEARANCE

Very small, oval, flattened, and easily overlooked. Young females have a yellow body visible through a translucent wax cover, turning opaque and brownish with age, occasionally with red stripes, about 1mm long. Adult females are immobile and lack legs.

Males, covered in white wax, about 0.75mm long. They have legs and single pair of wings, resembling tiny gnats.

They are typically found on the underside of leaves, along the veins.

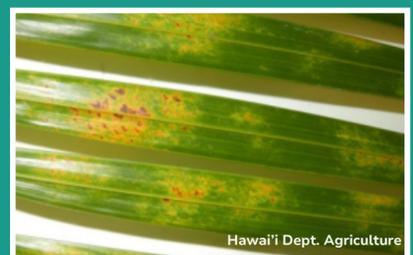


#### 2. SYMPTOMS ON PLANTS

Yellow blotches on upper leaf surfaces can appear in infested plants due to sap extraction.

Often, wilting of and premature leaf drop can be observed.

Heavily infested plants can experience stunted growth and reduced vigour.



### THE PROBLEM

Phantasma scale infestations can cause severe damage to palms and other host species, leading to reduced photosynthesis, defoliation and potential death if the plant is left untreated.

 **Damage to collections:** Severe infestations can result in the loss of unique specimens as well as disruption local ecosystems due to declines of native palm populations.

 **Economic impact:** This pest poses a serious threat not only to the palm industry but also to botanic gardens/arboreta as managing infestations require significant resources including labour and financial investment in pest control measures .

### WHAT TO DO?



#### PREVENTION

1. **Quarantine:** Implement strict quarantine measures to protect uninfested areas.
2. **Responsible sourcing:** Source palms and other host plants from reputable suppliers.



#### DETECTION & MANAGEMENT

1. **Monitoring:** Regularly monitor the collection (especially newly introduced plants) for early signs of infestation.
2. **Removal:** Physically remove scales by pruning heavily infested fronds.
3. **Disposal:** Dispose of infested plant material properly to prevent further spread.
4. **Training:** Train garden staff and volunteers to recognise and report phantasma scale.
5. **Reporting:** Report sightings to local agricultural or environmental authorities.

For more information:

- Florida Environmental (2024). Phantasma Scale: Meaning, Symptoms and Effect.
- Ahmed et al. (2021). Field report and survey of Fiorinia phantasma (Hemiptera: Diaspididae), potential pest of palms, and ornamental plants in the United States. Journal of Integrated Pest Management, 12(1), 33.



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