#### Orange Spiny Whitefly Aleurocanthus spiniferus



Image Credit: Francesco Porcelli, DiBCA sez Entomologia e Zoologia , University of Bari, EPPO website - http://photos.eppo.org/index.php/image/2602-alecsn-08



## **Orange Spiny Whitefly**

- Orange spiny whitefly (OSW) is native to tropical Asia
- It can be found in countries around the world
- It is a major pest of citrus, but has many other hosts



Image Credit: M.A. van den Berg, Institute for Tropical and Subtropical Crops, Bugwood.org # UGA1263006



## Distribution

- OSW has spread throughout Asia, Africa, Australia and the Pacific Region
- OSW has also been found in the Caribbean Islands and in Europe
- It was first discovered in the U.S. in Hawaii in 1974, though there are no records that OSW has been introduced into the continental U.S.



## Hosts

- Citrus is an economically important host of this pest
- It also attacks many other hosts such as:
  - roses, grapes, peaches, guavas, apricots, pears and persimmons
  - Many plants found in the natural landscape as well as ornamental cultivars



Sooty mold on citrus caused by this pest

Image credit: M.A. van den Berg, Institute for Tropical and Subtropical Crops, Bugwood.org # UGA1263007



#### Identification: eggs



#### Eggs and adults of orange spiny whitefly

Image Credit: Francesco Porcelli, DiBCA sez Entomologia e Zoologia, University of Bari, EPPO website - http://photos.eppo.org/index.php/image/2602-alecsn-06



#### **Identification: Immatures**



Image Credit: Francesco Porcelli, DiBCA sez Entomologia e Zoologia , University of Bari, EPPO website - http://photos.eppo.org/index.php/image/2602-alecsn-08



#### **Identification: Adults**



Image Credit: M.A. van den Berg, Institute for Tropical and Subtropical Crops, Bugwood.org #0177075



# Life Cycle

- Prefer mild temperatures and high humidity
- It generally takes 2 to 4 months to reach adulthood
- There can be 3 to 6 generations per year depending on environmental temperatures
- When plant material is disturbed, adults are very noticable
- Overwintering occurs in the nymphal stage



## Damage





Image Credit: Francesco Porcelli, University of Bari, EPPO website - http://photos.eppo.org/index.php/image/2604-alecsn-05 and http://photos.eppo.org/index.php/image/2601-alecsn-07

COMMUNITY FIRST DETECTOR

# Management

- Some important bio-control agents:
  - Encarsia smithi
  - Amitus hesperidum
  - Cryptognatha sp.
- Petroleum oils can be effective
- Chemical control is not effective
- If you think you have detected this pest, please contact your local county agent.



#### Look-alike species

#### • Citrus Blackfly (Aleurocanthus woglumi)



Citrus blackfly

Orange spiny whitefly



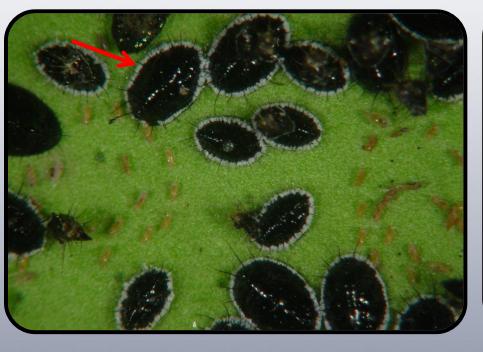
Image credit: citrus blackfly - Florida Division of Plant Industry Archive, Florida Department of Agriculture and Consumer Services, Bugwood.org, #5194004; orange spiny whitefly - M.A. van den Berg, Institute for Tropical and Subtropical Crops, Bugwood.org #0177075



### Look-alike species

• Citrus Blackfly (Aleurocanthus woglumi)

Citrus blackfly



Orange spiny whitefly



Image credit: citrus blackfly - Chazz Hesselein, Alabama Cooperative Extension System, bugwood.org #5439639; orange spiny whitefly - Francesco Porcelli, DiBCA sez Entomologia e Zoologia , University of Bari, EPPO website - http://photos.eppo.org/index.php/image/2602-alecsn-08



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## **Collaborating Agencies**

- U.S. Department of Agriculture Animal and Plant Health Inspection Service (USDA-APHIS)
- Cooperative Agricultural Pest Survey Program (CAPS)
- Florida Department of Agriculture and Consumer Services (FDACS)
- National Plant Diagnostic Network (NPDN)
- Sentinel Plant Network (SPN)
- Protect U.S.
- University of Florida Institute of Food and Agricultural Sciences (UF-IFAS)



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