

The pest

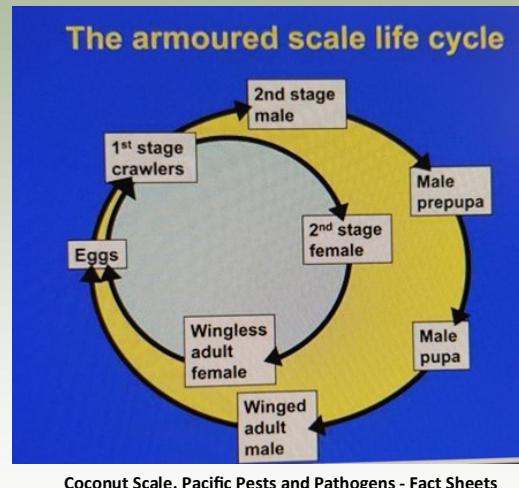
- The massive *Aspidiotus rigidus* infestation is the first record in the Philippines and second in Southeast Asia
- Potentially, the most destructive pest and a grave threat to the Philippine coconut industry

Nature of Damage

- Adult female feeds on the leaves, petioles, peduncle and fruits
- Its mouthparts is liken to a pump that continuously suck the sap of the plant part where it settles
- Yellowing and pre-mature drying of leaves occur due to the removal of plant sap and the saliva injected during feeding that kills the surrounding tissues (Waterhouse and Norris, 1987)
- Unabated infestation result to stunting, non-bearing and death of the palm



Life Cycle of *Aspidiotus rigidus*



- Males have a pupal stage and are winged upon emergence, live for few days only
- Females start to settle on the feeding sites on the second instar, wingless and legless adults
- Females are securely covered with thick scale made of waxy secretions and exuviae, impervious to topical sprays
- Females have thick cuticle
- Eggs are laid within the female on the lower part of the body (distinct characteristic from other *Aspidiotus* spp.)
- Total life cycle approximately 45 days
- Primary host is coconut but some plant species are infested-mangosteen, banana, nipa, red palm
- Known to occur only in Indonesia and the Philippines

Management Options

1. Regulated pruning of infested fronds starting on the 23rd frond (frond 1 being the youngest) and proper disposal



Normally not practiced during drought or summer season.

2. Chemical control using systemic insecticides, FPA-prescribed for coconut pests by trunk injection (for emergency situations only)



Topical application of vegetable oil in young palms can be done during cooler months.

3. Sustained release of biological control agents:

Chilocorus spp.,

*Telsimia** sp.,





Bathrachedra sp.* *Comperiella calauanica*



4. Implementation of quarantine regulations and establishment of checkpoints

Executive Order 169, BPI Special Quarantine Order No. 1, Series of 2013, 2014



*Identified by Plantwise, CABI U.K.

MANAGEMENT OF THE COCONUT SCALE INSECT (*Aspidiotus rigidus* Reyne)

For more information, please call or write:

Integrated Crop Protection Division
Davao Research Center
Philippine Coconut Authority
Department of Agriculture
Bago Oshiro, Tugbok District, Davao City
Telephone no. (082) 293-0113, 0115
Fax No. (082) 293-0571

E-mail Address: pca.drc2015@gmail.com
drc@pca.gov.ph

