1. PaDIL Species Factsheet

Scientific Name:
*Asperisporium caricae* (Speg.) Maubl
(Anamorphic fungi - Ascomycetes)

Common Name
Asperisporium Black Spot of Papaya

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2. Species Information

2.1. Details

**Specimen Contact:** Dr Jose Liberato - jose.liberato@dpi.qld.gov.au  
**Author:** Liberato JR, McTaggart AR & Shivas RG  
**Citation:** Liberato JR, McTaggart AR & Shivas RG (2006) Asperisporium Black Spot of Papaya (*Asperisporium caricae*) Updated on 10/9/2012 Available online: PaDIL - http://www.padil.gov.au  
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2.2. URL


2.3. Facets

- **Status:** Exotic Species Occurrence in Australia  
- **Group:** Fungi  
- **Commodity Overview:** Horticulture  
- **Commodity Type:** Fresh Fruit  
- **Distribution:** USA and Canada, Central and South America, Africa, South and South-East Asia, Australasian - Oceanian

2.4. Other Names

- *Cercospora caricae* Speg.  
- *Epiclinium cumminsii* Massee  
- *Fusicladium caricae* (Speg.) Sacc.  
- *Pucciniopsis caricae* (Speg.) Höhn.  
- *Pucciniopsis caricae* Earle  
- *Scolicotrichum caricae* Ellis & Everh.

2.5. Diagnostic Notes

The fungus: Sporodochia hypophyllous, dark blackish brown to black. Stroma well-developed, erumpent. Conidiophores closely packed together and covering the surface of the stroma, usually unbranched, hyaline to olivaceous brown, with several prominent conidial scars at the apex, up to 45 x 6–9 µm. Conidia solitary, ellipsoidal, pyriform or clavate, 1-septate, hyaline to mid pale brown, verrucose, 14–26 x 7–10 µm (Maublanc 1913, Ellis 1970, Ellis & Holliday 1972).

Symptoms: Black pustules on the abaxial surface of the leaf are characteristic of this disease. The first symptoms are scattered small spots, visible on both leaf surfaces. On the upper surface, the lesions are rounded or somewhat angular, 1-4 mm in diameter, pale yellow, with dark margins. Later the lesions become necrotic and whitish. On the lower surface, the lesions are covered with masses of fungal spores which appear as dark dots. The pustules can cover the whole lesion (Maublanc, 1913).

The disease is more intense on the lower leaves. Sometimes the leaf lesions can cover an extensive area, causing yellowish and premature drop. The pustules also occur on fruit. The lesions are superficial and do not enter the flesh of the fruit. The damage to fruit is entirely cosmetic.
The black lesions can appear white if hyperparasitized by fungi such as _Cephalosporium_, _Rhinotrichum gossypinum_ and _Verticillium_.

2.6. References
3. Diagnostic Images

1. Fruit symptoms
   **Host Symptoms:** Liberato & Zambolim (2002)

2. Fruit symptoms
   **Host Symptoms:** Dr Jose Liberato DPI&F

3. Leaf symptoms
   **Host Symptoms:** Dr Jose Liberato DPI&F

4. Leaf symptoms
   **Host Symptoms:** Dr Jose Liberato DPI&F

5. Lesions on the adaxial leaf surface
   **Host Symptoms:** Dr Jose Liberato DPI&F

6. Pustules on the adaxial leaf surface
   **Host Symptoms:** Dr Jose Liberato DPI&F
Pustules on the leaf
**Host Symptoms:** Dr Jose Liberato DPI&F

Asperisporium caricae. Conidiophores and conidium.
**LM:** Alistair McTaggart DPI&F

Asperisporium caricae. Conidiophores.
**LM:** Alistair McTaggart DPI&F

Lesion on the abaxial leaf surface
**Host Symptoms:** Dr Jose Liberato DPI&F

Asperisporium caricae. Conidiophores and conidium.
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Asperisporium caricae. Conidiophores.
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