

First record of *Cercospora basellae-albae* from the Philippines

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Abstract. Necrotic spots on both young and mature leaves of *Basella alba* cv. Rubra were found at different sites near Los Baños, Laguna Province in the Philippines. The spots were colonised by *Cercospora basellae-albae*. This is the first record of *Cercospora basellae-albae* from the Philippines.

Additional keywords: *Cercospora basellae-albae*, *Basella alba*, *Basella rubra*.

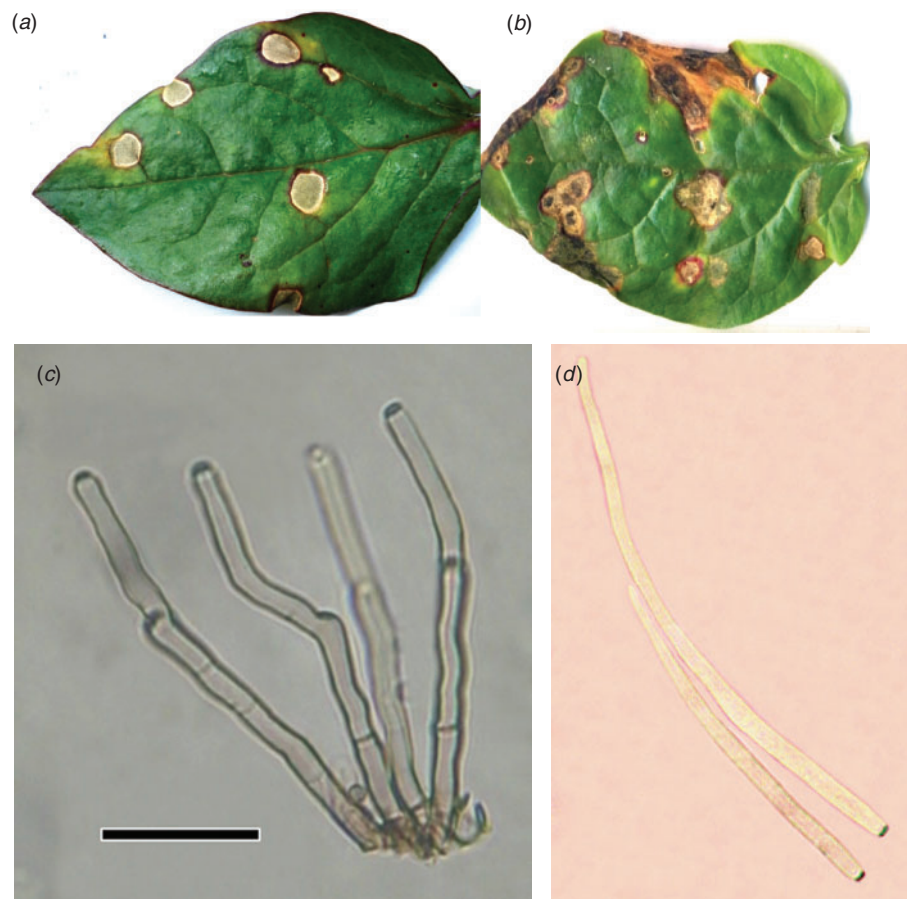


Fig. 1. *Cercospora basellae-albae* in the Philippines. (a, b) Leaf spots on *Basella alba* cv. Rubra. (c) Conidiophores. (d) Conidia. Bar = 20 µm.

Introduction

Basella alba (Basellaceae), also known as Indian spinach, Ceylon spinach, vine spinach, Malabar spinach or Malabar nightshade is an attractive perennial vine, mostly cultivated as a leafy vegetable and spinach substitute, which is rich in vitamins A and C (ECHO, 2006). *Basella* was introduced from India, and is distributed widely in the tropics as an ornamental in warmer temperate regions. *Basella alba* cv. Rubra has red stems, dark green leaves with red veins and pink flowers. *Cercospora basellae-albae* R.K. Srivast., S. Narayan & A.K. Srivast. was first described from *Basella alba* in India (Srivastava *et al.* 1994) and was reported recently in Thailand (Meeboon *et al.* 2007).

Host symptoms and fungal morphology

Spots on *Basella alba* were found on both sides of the leaves. Spots were circular to subcircular, 1–10 mm wide, at first uniformly reddish brown, later becoming blackish brown, with grey centres and reddish purple borders up to 10 mm wide (Fig. 1a, b). Dense fascicles of conidiophores were visible as minute black dots on the leaf spots. Sporulation was amphigenous, stromata or a few brown cells were present; conidiophores 1–10 in a fascicle, pale olivaceous brown, uniform in colour and width, not branched, straight or mildly geniculate with thickened conidial scars, sparingly septate, 50–140 × 3–9 µm (Fig. 1c). Conidia were hyaline, acicular, straight to slightly curved, indistinctly multiseptate, acute at the apex, truncate at the base with a thickened hilum,

45–120 × 3–8 µm (Fig. 1d). On the basis of these observations the fungus was identified as *C. basellae-albae* based on the description given by Srivastava *et al.* (1994).

Crous and Braun (2003) stated that *C. basellae-albae* was close or identical to *C. apii* s. lat. except that *C. apii* s. lat. has longer conidia (48–340 µm) and narrower conidiophores (1.5–2 µm) than *C. basellae-albae*. Disease specimens of *C. basellae-albae* have been deposited in the Mycological Herbarium, University of the Philippines Los Baños with reference collection accession number CALP 11735 on *B. alba* and CALP 11674 on *B. rubra*. This is the first record of *C. basellae-albae* from the Philippines.

References

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