



## Crepe jasmine rust caused by *Uredo manilensis* newly reported in Cuba

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Received: 12 Mar 2011. Published: 29 Jun 2011. Keywords: *Tabernaemontana divaricata*, *Puccinia engleriana*, *Puccinia morobensis*.

Crepe jasmine, *Tabernaemontana divaricata* (Apocynaceae), is a popular flowering shrub in Cuba. Native of Southeast Asia, it is one of approximately 100 ornamental species in the genus. In March 2010, a rust was observed on leaves of plants in a garden in Santiago de Cuba city and on landscape plants in several municipalities of Havana city. Leaf lesions began as chlorotic flecks that expanded into necrotic spots with orange-to-reddish brown, subepidermal uredinia; brown telia developed on the abaxial side of leaves (Fig. 1). Urediniospores were one-celled, initially hyaline, minutely echinulate and spherical, turning dark orange, and measuring (23) 26-30 (32) x (20) 24-26 (28)  $\mu\text{m}$  (Fig. 2). Teliospores were (28) 32-36 (42) x (20) 22-26 (28)  $\mu\text{m}$ , two-celled, ellipsoidal to ovoid, echinulate, constricted at the septum, reddish brown, and had 0.8  $\mu\text{m}$  thick spore walls (Fig. 3); pedicels were persistent and hyaline. Attributes for urediniospores were consistent with those from the original description of *Uredo manilensis* on *T. coronariae* in Manila, Philippines (Sydow & Sydow, 1910). However, there were no reports of a telial stage for this rust. Attributes for urediniospores were consistent with those described from *T. divaricata* in Florida, USA (Perez *et al.*, 2008), which contained teliospores that matched in form and colour with those found in Cuba. However, Cuban specimens had teliospores somewhat larger than Florida specimens ([26] 29-36 [38] x [20] 22-26 [28]  $\mu\text{m}$ ).

Three *Puccinia* species have been reported on species of *Tabernaemontana*: *P. engleriana*, *P. tabernaemontana* and *P. morobensis* (Farr & Rossman, 2010). *Puccinia engleriana* differs from the South

Florida and Cuban specimens of *U. manilensis* by its larger teliospores ([32] 35-41 [45] x [21] 22-24  $\mu\text{m}$ ). *Puccinia tabernaemontana* has larger urediniospores (34-41[45] x 26-32 [34]  $\mu\text{m}$ ) and yellow-brown, poorly echinulated to almost smooth teliospores. Meanwhile, teliospores (24-29 x 33-45  $\mu\text{m}$ ) and urediniospores (23-28 x 29-35  $\mu\text{m}$ ) of *P. morobensis* are larger and the pedicels are very short and fragile (Perez *et al.*, 2008). This is the first report of *U. manilensis* in Cuba and the second report in the Western Hemisphere after the report in South Florida (Perez *et al.*, 2008). Also, this is the second time a telial stage (provisionally *P. manilensis*) has been recognised for this fungus.

### Acknowledgements

We sincerely thank J. M. Perez, Brooks Tropical, for his helpful advice.

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Figure 1

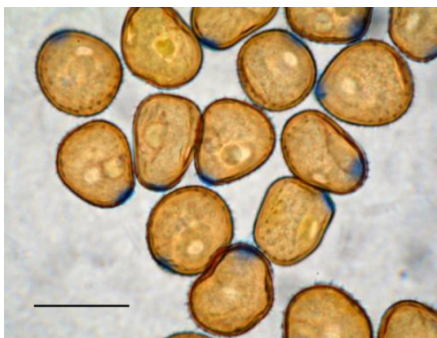


Figure 2

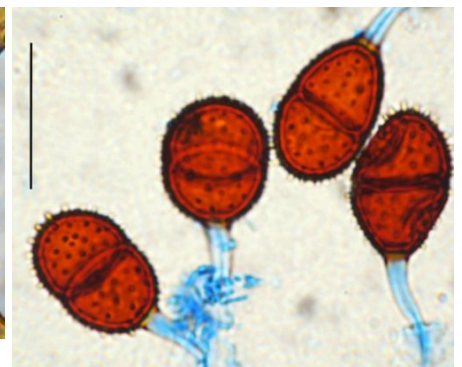


Figure 3

**To cite this report:** Martínez-de la Parte E, Cantillo-Pérez T, García D, Guerrero-Barriel D, 2011. Crepe jasmine rust caused by *Uredo manilensis* newly reported in Cuba. *New Disease Reports* **23**, 32. [doi:10.5197/j.2044-0588.2011.023.032]

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