

FIRST REPORT OF *Uredo crepidis-japonicae* AND *Septoria crepidis*
ON *Crepis japonica* IN BRAZIL

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RESUMO

Primeiro relato de *Uredo crepidis-japonicae* e *Septoria crepidis* em *Crepis japonica* no Brasil

Dois fungos fitopatogênicos foram encontrados atacando *Crepis japonica* em Viçosa, MG. Os fungos foram identificados

como *Uredo crepidis-japonicae* e *Septoria crepidis*. Este é o primeiro relato desses fitopatógenos em *C. japonica* no Brasil.

Crepis japonica Benth is a herbaceous plant native from China and Japan which was recently introduced into Brazil, where it is disseminating rapidly and already has become an important weed in nurseries (Plantas Daninhas do Brasil, 3^a ed., pg.146, 2000). In July 2000 a leaf rust was observed on *C. japonica* growing in a citrus (*Citrus* sp.) nursery situated in Viçosa, Minas Gerais State, Brazil. The fungus was identified as *Uredo crepidis-japonicae* Lindroth which has been reported only from Australia, Continental China, Formosa (Taiwan) and Japan (Rept. Tottori Mycol. Inst., n.08, pg.1, 1980). Irregularly oval shaped leaf lesions were dark-brown due to the presence of a powdery mass of uredospores (Figure 1A). Severely infected leaves were chlorotic. Morphological features for this fungus were: uredia, 0.3 to 0.5 mm diam; uredospores spherical, 14 to 20 µm diam, pale brown, with 3 to 4 germ pores, and walls 1µm thick. *U. crepidis-japonicae* is the uredial stage of *Puccinia crepidis-japonicae* Dietel, but no teliospores were found in the material examined (VIC 22136). However, size and shape of uredospore alone suffices for distinguishing this species from other rust fungi on *Crepis* spp. (Table 1).

In January 2001 another foliar disease on young and old leaves was also observed on *C. japonica*, at a different site in Viçosa. The inciting agent was identified as *Septoria crepidis* Vestreng. (Syll. Fung., XIV, pg. 974, 1899) known from USA, Europe and Asia. Lesions were necrotic, irregular, pale-brown, 1 to 8mm diam. The fungus had immersed, globose pycnidial conidiomata (Figure 1B), 60 to 70 µm diam, pale-brown, ostiolate, conidiophores were absent; conidia were hyaline, filiform, multiseptate, 25 to 35 µm x 1.0 to 1.5 µm (VIC 22137).

These are the first reports of occurrence of these fungi in Brazil. Both fungi were probably introduced into Brazil

together with their host and may be playing a significant role as biocontrol agents for this potentially damaging weed.

TABLE 1 - Morphological characteristics of uredospores of rust fungi (*Puccinia* spp.) with uredial stage on *Crepis* spp.

Species	Shape	Germ pore	Size (µm)	Wall (µm)
<i>P. crepidis-montanae</i> (Syd.) Magn.	Globoid or obovoid	3 or 4	19-25 x 23-29	1.5 - 2.0
<i>P. hieracii</i> Martius	Globoid or obovoid	2 or 3	18-29 x 26-42	1.0 - 2.5
<i>P. crepidis-integrae</i> Hiratsuka	Subglobose	4 to 6	18-28	2.2
<i>P. crepidis-japonicae</i> Dietel ¹	Subglobose	3 or 4 rarely 5	14-18	1.0
<i>P. crepidis-japonicae</i> Dietel ²	Subglobose	3 or 4	14- 20	1.0 - 1.5

¹original report;

²specimen from Brazil.

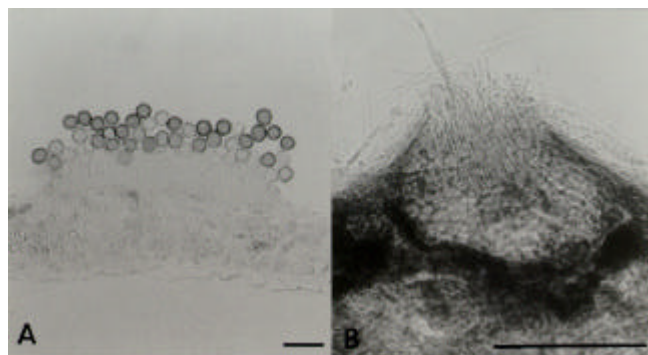


FIG. 1 - A. *Uredo crepidis-japonicae*, uredia with uredospores. B. *Septoria crepidis*, pycnidial conidiomata. Scale bars: 50 µm.