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SHORT COMMUNICATION

NEW RUST DISEASES IN THREE ORNAMENTAL PLANT SPECIES IN SRI LANKA

N.K.B. ADIKARAM*, I. S. K. VITHANAGE AND DEEPTHI YAKANDAWALA
Department of Botany, Faculty of Science, University of Peradeniya,
Peradeniya 20400, Sri Lanka.

*Correspondence to: n.k.b.adikaram@gmail.com

Rust disease in *Jasminum multiflorum* (Oleaceae) [*Uromyces hobsonii* Vize [as '*hobsoni*']

Leaves of *Jasminum multiflorum* were observed with small (2-5 mm), rusty, orange colour, powdery areas on the lower surface (Fig. 1b) in Peradeniya and Kandy (Central Province). The diseased areas consisted of numerous uredia of about 0.5 mm diameter. At advanced stages of infection, the leaves showed yellowing and wrinkling. The upper surface directly opposite the patches were bright yellow colour and circular (Fig. 1a). This disease occurred year round but was severe in the months from July – October during monsoon rains. The causal agent was identified as *Uromyces hobsonii* Vize [Syn: *Coeomurus hobsonii* (Vize) Kuntze, *Pucciniola hobsonii* (Vize) Syd. (Cooke, 1876; Cummins, 1941). Uredospores were broadly ovate, pointed, light orange brown (Fig. 1c), 19.2 – 23.5 μ (14.43 ± 1-46) X 17.8 – 25.5 μ (17.8 ± 1.67). Teliospores were not observed. Since the first record in India in the 19th century (Cooke, 1876), the disease has been reported from New Guinea (Cummins, 1941), China (Zhuang, 1993) and recently from New Zealand (Kuvalekar et al. 2011).

Fig.1. Rust infected leaf of J. multiflorum (a) upper surface with yellow spots and (b) Lower surface with yellow- orange colour uredia, and (d) uredospores (X400).

Leaf rust of *Gerenium nepalense* Sweet (*Puccinia pelargonii-zonalis* Doidge)

Early symptoms were the formation of small, pale yellow spots on the under surface of leaves (Fig. 2b). Spots enlarge and turn to cinnamon-brown irregular circles. Yellow spots opposite the pustules appear on upper surface (Fig. 2a). The fungus produces ovoid or subglobose, yellow-brown, slightly echinulate, thin walled uredospores (Fig. 2c). Teliospores (CMI Descriptions of Pathogenic Fungi and Bacteria, 1970a) were not observed.

In Sri Lanka the disease is confined to higher elevations. This disease was first found in South Africa in 1926, which had later been reported from Australia, New Zealand, Europe and USA (CMI Descriptions of Pathogenic Fungi and Bacteria, 1970a).

Fig. 2 Rust infected leaf of P. nepalanse (a) upper surface with yellow spots and (b) Lower surface with uredia forming irregular circles, (c) uredospores.

Leaf rust of canna (*Canna indica* L. and *Canna* hybrids) caused by *Uredo pseudocannae*

Early symptoms were orange colour, powdery, small (1-2 mm), scattered, spots on the lower surface of leaves and petioles (Fig. 3a). In advanced stage, the spots coalesce and necrotic areas appear. The fungus is restricted to the lower surface but yellow spotting could be seen on the upper surface directly opposite the fungal sori (Fig. 3b). Uredospores were ovoid or pyriform, echinulate (Fig. 3c) with thick cell wall (CMI Descriptions of Pathogenic Fungi and Bacteria, 1970b). They are brown to yellow in colour. Teliospores were not observed. The disease was found in most parts of the country, the Central, Sabaragamuwa, Western and

Southern Provinces, in *Canna indica* L. and horticultural hybrids of *Canna*.

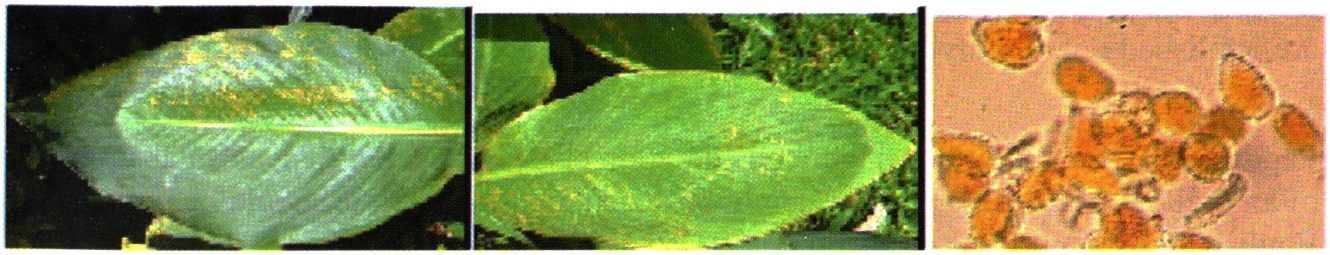

Fig. 3. Canna (Hybrid) leaf infected with U. pseudocannae (a) upper surface, (b) lower surface with orange colour uredia, (c) uredo spores.

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