

SPHENOSPORA KEVORKIANII, A RUST FUNGUS (UREDINALES: RAVENELIACEAE) ON THE ORCHID *PLEUROTHALLIS MENTIGERA*

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SHORT COMMUNICATION

ABSTRACT

A rust disease on the Brazilian orchid *Pleurothallis mentigera* was found in Mata do Jambreiro, a tropical forest in Minas Gerais State, caused by a fungus identified as *Sphenospora kevorkianii* Linder is described. *P. mentigera* Kraenzl. is added to *S. kevorkianii* host range.

Key words: *Pleurothallis mentigera*, *Sphenospora kevorkianii*, Orchidaceae, rust, taxonomy.

Pleurothallis mentigera Kraenzl. is a rare epiphytically Brazilian orchid, found only in the tropical forest. During our survey of the mycobiota associated with Brazilian wild orchids, in June 2001, we found a rust disease on some leaves of *P. mentigera* (Tribe Epidendreae, Subtribe Pleurothallidinae) collected in Mata do Jambreiro, a protected area for biological conservation in Minas Gerais State, Brazil. The fungus was identified as *Sphenospora kevorkianii* Linder, which has been first reported from the orchid *Epidendrum difforme* Jacq. (Tribe Epidendreae, Subtribe Laeliinae) (3). The genus *Sphenospora* Dietel occurs in Africa, but primarily in the American tropics (3). In Brazil, *S. kevorkianii* has been reported on *Cyrtopodium punctatum* (L.) Lindl., *Notylia lyrata* F. Moore, *Prescottia sclerophylla* Lindley, *Stanhopea graveolens* Lindley and *Zygostates lunata* Lindley (2). According to the literature, this is the first report of occurrence of a rust fungus on the Subtribe Pleurothallidinae (Orchidaceae).

Spermogonia and aecia unknown. Uredosorus hypophyllous, subepidermal, becoming erumpent. Uredospores ovoid, ellipsoid or subspherical, 28-33 x 18-26 µm, membrane 1.5-3.5 µm thick, germ-pores obscure or one, equatorial. Telia subepidermal, becoming erumpent as an abundance of a dark orange colored oil (1), becoming dark-brown or black, 1 mm

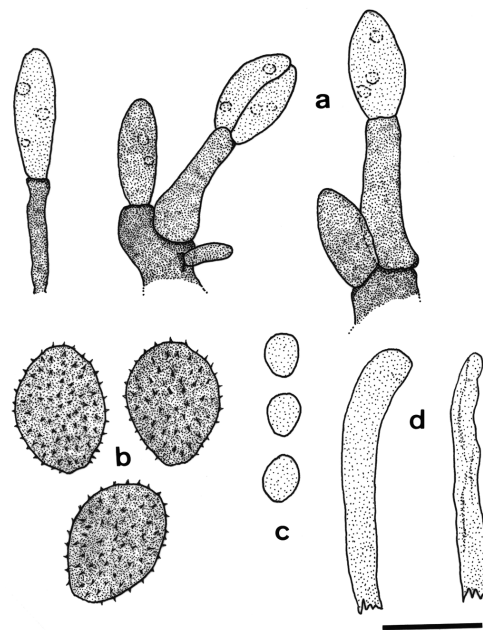


Figure 1. *Sphenospora kevorkianii*. a. Teliospores. b. Uredospores. c. Basidiospores. d. Paraphyses. Scale bar: 25µm.

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diam. Teliospores borne singly on pedicels, ellipsoid, thin-walled, 23-28 x 13-16 μm . Paraphyses numerous, clavate or cylindrical, some curved, 100-116 x 8-10 μm , yellow pigmented. Basidiospores yellowish, globular or irregularly ovoid, 8-11 x 6-7 μm .

Habitat: On leaves of *Pleurothallis mentigera*, Mata do Jambreiro, between Belo Horizonte and Nova Lima, Minas Gerais State, Brazil. Specimen examined: VIC 22171, deposited in VIC Herbarium, 19 november 2001.

RESUMO

Sphenospora kevorkianii*, fungo causador de ferrugem (Uredinales: Raveneliaceae) na orquídea *Pleurothallis mentigera

Uma nova doença causada por ferrugem foi encontrada em *Pleurothallis mentigera*, orquídea brasileira, na floresta tropical da Mata do Jambreiro, no Estado de Minas Gerais. O agente etiológico foi identificado como sendo *Sphenospora kevorkianii*. *P. mentigera* deve ser adicionada à lista de hospedeiros de *S. kevorkianii*.

Palavras-chave: *Sphenospora kevorkianii*, *Pleurothallis mentigera*, ferrugem, Orchidaceae, taxonomia.

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