

MICOLOGIA

752

First report of *Thielaviopsis basicola* causing black rot on carrot in Central Brazil.

(Primeiro relato de *Thielaviopsis basicola* causando podridão-negra em cenoura no Brasil Central.)

Inácio, C.A.¹, Lemes, G.P.², Café-Filho, A.C.², Lopes, C.A.³

¹Universidade Federal Rural do Rio de Janeiro, Rio de Janeiro, RJ; ²Universidade de Brasília, Brasília, DF. ³Embrapa Hortaliças, Brasília, DF. E-mail: inacio@ufrj.br

The disease known as “black rot” of carrot (*Daucus carota*, Apiaceae) caused by *Thielaviopsis basicola* (= *Chalara elegans*) has been reported in many carrot producing areas around the world, including recent reports from the States of Rio Grande do Sul and Rio de Janeiro, Brazil. During the Brazilian Mid-West rainy season (summer 2011), carrots harvested on agricultural properties of Brazlândia and Alexandre Gusmão, DF, showing symptoms similar to black rot, were collected at the wholesale market - CEASA, DF. Diseased roots were taken to the Laboratory of Plant Pathology of University of Brasilia (UnB). This work reports the identification and characterization of the disease causal agent including the verification of pathogenicity. Optical and dissecting microscope techniques were used to examine symptomatic roots, and showed abundant presence of fungal structures. A fungus from tissue adjacent to symptomatic tissue repeatedly isolated on PDA (Potato Dextrose Agar) amended with chloramphenicol. Pathogenicity of the isolate was confirmed by inoculation of carrot roots with or without injury. This fungus was identified as *Thielaviopsis basicola*. It forms superficial colonies on carrot root, grayish to dark – greenish or dark, rather irregular, covering several parts on root. Forming greenish-grey colonies on PDA, *conidiophores* 62-175 × 7-10 µm, colorless to light-brown. *Conidia* 5-25 × 4-7 µm, cylindrical, sometimes truncate at ends, smooth. *Chlamydozoospores* 8-12 µm wide, brown, 3-6 septate. This the first report of *Thielaviopsis basicola* (= *Chalara elegans*) on carrot in Central Brazil.

Apoio: CNPq, FAPDF.