

WEB BLIGHT (*Thanatephorus cucumeris*) OF PASSION FRUIT IN THE STATE OF PARÁ, BRAZIL

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RESUMO

Queima da teia micélica causada por *Thanatephorus cucumeris* em maracujazeiro no Estado do Pará, Brasil

Durante o mês de maio de 1998, verificou-se a ocorrência de lesões foliares em plantios comerciais de maracujazeiro (*Passiflorae edulis* f. *flavicarpa* Deg) localizados nos municípios paraenses de Capitão Poço e Igarapé-Açu. Através de estudos morfológicos e testes de patogenicidade,

identificou-se a doença como sendo Queima da teia micélica, causada pelo fungo *Thanatephorus cucumeris* (Frank) Donk. Este é o primeiro registro de *Thanatephorus cucumeris* atacando maracujazeiro no Brasil.

Yellow passion fruit tree (*Passiflora edulis* f. *flavicarpa* Deg.) is one of the most cultivated species in the State of Pará, Brazil, and one of the major economical sources in some counties such as Castanhal, Igarapé-Açu, Santa Maria and Capitão Poço. In the last few years, passion fruit diseases have caused increasing losses in production and fruit quality. In May 1998, mainly in C. Poço and Igarapé - Açú orchards, a disease caused leaf drying. Initially, leaves presented rounded small light green waterish spots, which increased in size and coalesced, forming irregular necrotic areas (Fig.1) surrounded by a chlorotic halo. Fungus hypha grew on the lesions and extended very quickly to healthy tissue, as leaves were held together by a mycelial thread, on which microesclerodia was formed. By isolations from diseased tissue and from microesclerodia, in PDA culture media, a fungus with light brown and thin-walled hypha branched at 90° angles was obtained. After nine days of incubation (21 ± 1 °C) of fungus culture in Petri dishes under 100% humidity (Carpenter, J.B. *Phytopathology* 39: 980-985.1949) the hyphae grew towards the Petri dish cover, showing basidia with hyaline oblong ellipsoidal basidiospores (6-10 x 3,7-6,2µ). Based on disease symptoms and in the fungus morphological characteristics, the species of the pathogen is *Thanatephorus cucumeris* (Frank) Donk, perfect stage of *Rhizoctonia solani* Kuhn. The pathogenicity test was carried out by two methods of inoculation. In the first method, mycelial discs (diameter = 5 mm) were inoculated on the upper surface of leaves of two month old yellow passion fruit seedlings. In the other one, the inoculation was made by spraying mycelial fragments and microesclerodia on the leaves. After inoculation, plants were kept in a humid chamber for 48h, inside a screenhouse. Disease symptoms appeared after five days

with both inoculation methods. *T. cucumeris* was reisolated from artificially inoculated diseased plants. Web blight of passion fruit has been described before in Trinidad and Tobago (Fortune *et al.* *Proceedings of the seventh annual seminar on agricultural research. Trinidad and Tobago.* 1993) In Brazil, this is the first report on *T. cucumeris* on leaves of yellow passion fruit. The fungus is deposited in the Embrapa Amazônia Oriental Mycological Collection.



FIG. 1 - Symptoms on passion fruit naturally infected leaf.