

琉球大学学術リポジトリ

[資料] The Genus *Phytophthora* Found in Okinawa

メタデータ	言語: en 出版者: 沖縄農業研究会 公開日: 2009-01-29 キーワード (Ja): キーワード (En): 作成者: 田盛, 正雄 メールアドレス: 所属:
URL	http://hdl.handle.net/20.500.12000/0002015168

The Genus *Phytophthora* Found in Okinawa*

By

Masao TAMORI**

2. *Phytophthora melongenae* Sawada in Trans. Form. Nat. Hist. Soc. 19, p. 2, 1914. (Sawada, Spec. Rep. Exp.Sta. Formosa XI, p. 60, pl. III, 1915; Descr. Catal. Form. Fungi I, p. 80, 1919; III, p. 29, pl. III, figs. 1—9, text figs. 1—7, 1927; Ocfemia, Philippine Agric. XIV, p. 317, 1925; Saccardo, Syll. Fung. XXIV, p. 36; Tanaka, Mycol. IX, p.

250, 1917; Waterhouse, The Genus *Phytophthora* p. 64, 1956).

Hab. in Okinawa. on *Solanum melongena* L. (Nasu) Kokuba, Naha City (Nov. 2, 1964, p—4).

Description of the fungus: (Reprinted from New Japanese Fungi, Notes and Translations—II, by Tanaka, 1917).

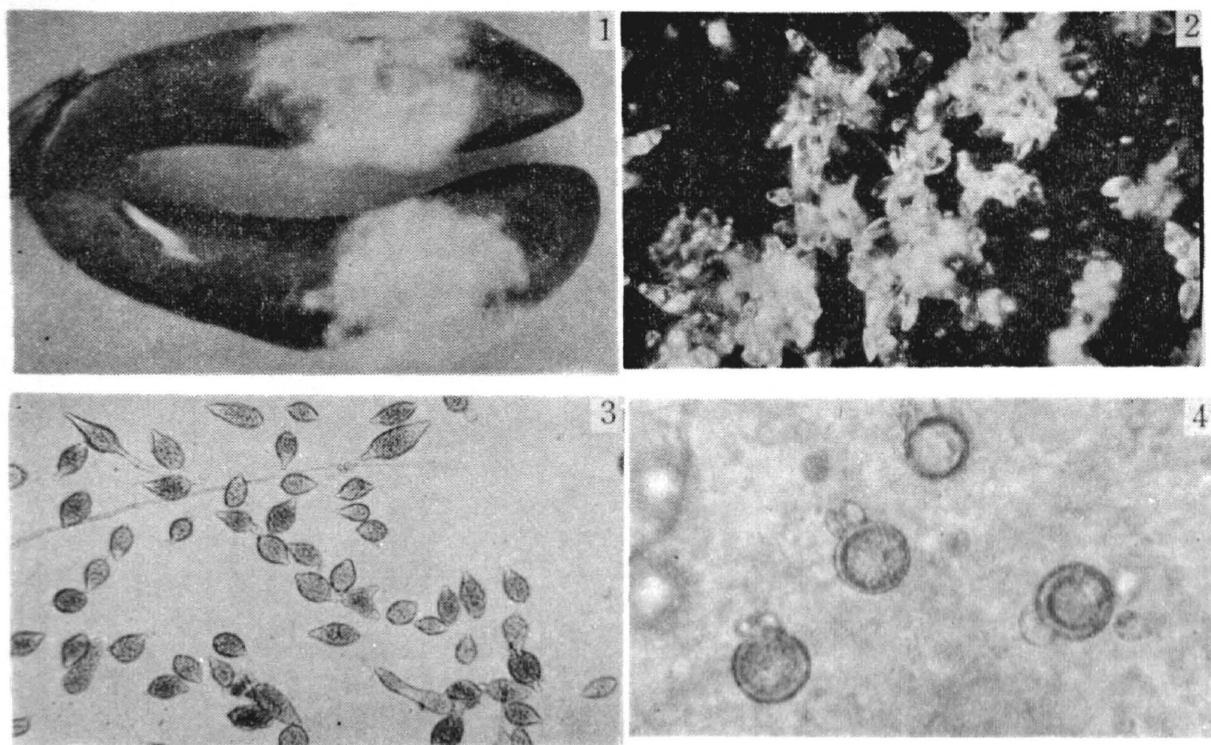


Photo:

1. Fruits of *Solanum melongena* inoculated with *Phytophthora melongenae*.
2. Sporangial mass of *P. melongenae* grown on the surface of the fruit.
3. Sporangia of *P. melongenae* ($\times 150$)
4. Oogonia of *P. melongenae* ($\times 600$)

* Contribution from Laboratory of Phytopathology, College of Agriculture, Home Economics & Engineering, University of the Ryukyus. No. 24.

** Department of Agriculture, University of the Ryukyus.

Hyphae intercellular in the host tissue or freely penetrating the cell wall, much branched, not septate in juvenile stage but septate when mature; aerial hyphae mostly not branching, usually attaining a considerable length, nearly uniform in diameter, the base always irregularly twisted, swelled or short-branched, and very characteristic; diam. of hyphae 4–8 μ ; haustoria none. Conidial phores hardly distinguishable from aerial hyphae, filiform, delicate, very much elongated, the shortest measuring 80 in length, 3–5 μ across; conidia spherical, broad-oval or oval, 24–27 \times 20–48 μ , average 42.4 \times 33.9 μ , with apical hemi-

spherical papillae 3–5 μ high, producing several to 40 zoospores; zoospores ovoid or ellipsoid, 10–11 \times 8 μ , with 2 cilia; chlamydospores yellowish-brown, spherical, 25–42 μ in diam.; oogonia formed in cultures on bean agar-agar medium, spherical, 18–23 \times 20–24 μ , containing one oospore; oospore spherical, walls 2 μ thick, colorless to very pale yellowish-brown, diameter 17–21 μ . Antheridia not formed on the same hyphae that bear the oogonia but on the end of other hyphae, surrounding tightly the oogonial stalk and attached to the wall of oogonia at the juncture with the stalk, oblate spheroidal or nearly spherical, 10–14 \times 12–16 μ .