

Two new species of *Pestalotiopsis* isolated from healthy loquat flowers in Japan

Takaki Nakashima¹⁾, Syunsuke Nozawa²⁾, Yoshiki Takata²⁾, Kiichi Kaneko¹⁾,
Keisuke Uchikawa³⁾, Kyoko Watanabe^{1,2)}

¹⁾Under Graduate School of Agriculture, Tamagawa University, Japan

²⁾Graduate School of Agriculture, Tamagawa University, Japan

³⁾Shimabara Regional development Bureau, Japan

Purpose: The genus *Pestalotiopsis*: is ascomycetous belongs to the Amphisphaeriaceae. We found two new species which were isolated from healthy loquat flowers grown in Nagasaki Prefecture, Japan.

Methods: For taxonomic classification of both strains [TAP19N001, TAP19N002], molecular and morphological analysis were conducted.

Results: Phylogenetic trees [NJ, MP and MP trees] including reported species of the ITS + β -tubulin + tef1 regions placed each of the two new strains an independent species in *Pestalotiopsis*: s. str. Conidial morphology was compared based on 30 spores. Conidia of both strains were pyriform, slightly curved, and four septate with three median colored cells. TAP19N001 measurements were as follows: 12.5-19x3.5-5.5 μ m spore size, three median cells are 7.5-11.5 μ m length, and the number of appendages was 1-3, and 11.5-20.5 μ m in length. Morphologically, the most similar species to this strain was *P. guepinii*:, but conidia of TAP19N001 were smaller than those of *P. guepinii*:. TAP19N002 were: 19.5-22x4-6 μ m in size, three median cells are 11-13 μ m in length, the number of appendages is 1-3, and 9-17 μ m in length. Most similar species to this strain is *P. humus*: morphologically, but the maximum length 6 μ m of the appendages of TAP19N002 is longer than *P. humus*:.

Conclusions: These results provide each strain was new species belonging to the genus *Pestalotiopsis*: s. str