First report of summer canker caused by *Pectobacterium carotovorum* subsp. *actinidiae* on kiwifruit in Jiangxi, eastern China

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Bacterial canker-like symptoms on yellow kiwifruit (*Actinidia chinensis* cv. Hort16A) were observed in Fengxin county of Jiangxi province, eastern China with an incidence of approximately 10% (percentage of plant affected) in July 2018. The symptoms were characterised by cankers with reddish exudation on twigs and stems, closely resembling those caused by *Pseudomonas syringae* pv. *actinidiae*. However, the new disease occurs in the hot summer instead of early spring, and results in rapid wilting and death of the entire plant. The obtained 28 isolates in lysogeny broth medium from infected stem tissues were gram-negative, rod-shaped, facultative anaerobic, able to hydrolyze casein and gelatin, but not starch and Tween 80. They could cause hypersensitivity in tobacco, and grow well at 37 °C. The 16S rDNA region of a representative isolate (SKY-1) was sequenced (GenBank accession No. MH753595) and it showed 99% identity with *Pectobacterium carotovorum* subsp. *actinidiae* (*Pca*) (KY307837 and NR125539). PCR detection of *Pca* with specific primers PcaF/PcaR (Lee et al. 2015) was positive and the sequence (MH766659) shared 99% identity with the corresponding sequences in GenBank (KY315740 and FJ969378). Stems of kiwifruit plants (cv. Hort16A) from the field were inoculated by injecting 30 µl of a bacterial suspension (1×10^7 CFU/ml), while control stems were inoculated with sterilized water. All the tested samples were kept in a moist chamber at 33 °C. After 7 to 8 days, typical symptoms

similar to those in the field appeared on the inoculated stems, whereas the control stems remained symptomless. *Pca* was successfully re-isolated from symptomatic stems. *Pca* was previously observed in Korea and Sichuan province of southwest China (Koha et al. 2012; Wu et al. 2017). To our knowledge, this is the first report of *Pectobacterium carotovorum* subsp. *actinidiae* causing disease on kiwifruit in Jiangxi province, eastern China.

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