First report of *Aureobasidium pullulans* causing anthracnose on *Paeonia suffruticosa* in Korea

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During a recent survey on fungal pathogens carried out between 2017 and 2018, severe anthracnose symptoms on the leaves of *Paeonia suffruticosa* were consistently observed in Seoul, Korea. This includes angular black spots or blotches, in some cases, merged to form large blotches causing irregularly shaped leaves when heavily infected. To identify the pathogen, isolations were directly made by detaching spores from the leaves, and pure cultures were obtained by single spore isolations using 2% malt extract agar. All cultures obtained were deposited into the culture collection of the Forest Pathology Research Laboratory, National Institute of Forest Science, Korea (Accession No. CDH20181210-1 and CDH20181210-2). Microscopic examinations revealed hyaline to dark brown conidia to be one-celled, smooth, ellipsoidal, but variable in shape and size (Zalar et al. 2008). Furthermore, genomic DNAs were extracted from two representative isolates obtained and sequenced using ITS1 and ITS4 primers (White et al. 1990) and deposited in GenBank with the accession numbers MK271743 and MK271744. The phylogenetic analysis based on the Maximum Likelihood (ML) method was performed using sequences obtained in this study. The result showed that the isolates were clustered with the authentic isolates of *Aureobasidium pullulans* (Zalar et al. 2008), confirming its identity. Pathogenicity of the pathogen was confirmed via the inoculation trials where the detached

leaves were inoculated with the suspension of the pathogen adjusted to 10^5 conidia/ml and maintained in a moisture chamber at 25 °C under a 12-h photoperiod. To the best of our knowledge, this is the first report of *A. pullulans* causing anthracnose on *P. suffruticosa* in Korea or worldwide (Farr and Rossman 2018).

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Compliance with ethical standards

Conflict of interest The authors have no conflicts of interest to declare.

Ethical statements This article does not contain any studies with human participants or animals performed by any of the authors.

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