Abstract

During a survey of postharvest diseases in stored pears conducted in the 2001-02 storage season, a new postharvest fruit rot in d'Anjou pears was discovered in Washington State. Symptoms of this disease were stem-end rot, calyx-end rot, and wound-associated rot, which presumably originated from infections of stem, calyx, and wounds on the fruit surfaces, respectively. The decayed area on the fruit was firm or spongy and appeared brown. During the late storage period from March to May 2002, this disease was observed in 19 of 39 lots and accounted for 2 to 21% of all decayed fruit. The causal agent, *Sphaeropsis* sp., was consistently recovered from decayed fruit with the symptoms described above. Two isolates of the fungus were used for pathogenicity tests on pear fruit. Decay symptoms developed on fruit inoculated with spore suspensions of the fungus on the stem, calyx, and wounds on the fruit surface. The fungus was reisolated from these decayed fruit. The fungus, *Sphaeropsis pyriputrescens* sp. nov., was characterized and described. On potato dextrose agar (PDA), oatmeal agar, and pear juice agar at 20°C, the fungus grew at mean rates of 21, 15, and 24 mm day-1 in colony diameter, respectively. On PDA, the fungus formed a circular colony with dense, hyaline hyphae and a few or some aerial mycelia. Colonies appeared light yellow to yellow on 2-week-old PDA cultures. The fungus grew at temperatures from 0 to 25°C, with optimum growth between 15 and 20°C, little or no growth at 30°C, and no growth at 35°C. This is a low-temperature species.