In 2012, spots tan to grey in the center, surrounded by dark-brown to black margins were observed on leaves and fruits of jujube (Zizyphus jujuba Mill.) in Aksu (China). In September 2013, the disease was reported in 30% of the surveyed jujube fields. Leaf and fruit samples were collected from symptomatic plants. Thirty-six single-spore isolates of a fungus present on diseased materials were grown on potato dextrose agar (PDA) and their morphological characteristics recorded after incubation for one week at 25°C with 95% relative humidity and a 12 h photoperiod. Conidiophores were pale brown, septate, branched or unbranched. Conidia (11-20 × 4.0-9.0 μm) were obovate with a conical or cylindrical beak, ovoid or ellipsoidal. These morphological traits were similar to those described for Alternaria alternata (Simmons, 1967). The sequence of the internal transcribed spacer (ITS) region of the 18-26S nuclear ribosomal DNA of one isolate (GenBank accession No. KM229697) showed 99% similarity with an A. alternata strain (GenBank accession No. KC768067) and 98% similarity with seven additional strains (KJ605840, GQ169728, 21AB667801, KJ739879, HQ166366, JF973293 and KF181258) present in database. Fruits from four-year-old jujube trees were collected for pathogenicity tests. These fruits were wounded with a 0.3 mm depth and 5-8 mm length, inoculated singly with spore suspensions (1 × 106 spores/ml) of eight A. alternata isolates with three replicates (50 fruits/replicate), and placed in a moist chamber at 25°C with a 12 h photoperiod. Necrotic spots appeared around the wound two weeks post inoculation, and the pathogen was consistently re-isolated from diseased fruits. To our knowledge, this is the first report of A. alternata on jujube in China.


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