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SCREENING OF ASPARAGUS SPECIES FOR RESISTANCE TO STEMPHYLIUM LEAF SPOT

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ABSTRACT

Fourteen taxa of the genus Asparagus were screened for their resistance to Stemphylium leaf spot under controlled conditions in growth chambers. The plants were inoculated with a conidial suspension of two isolates of Stemphylium sp. from asparagus. Disease assessment was made 13-17 days after inoculation. Assessment was based on percentage stem area necrotic, which took into account the two components, lesion number and lesion size. A. officinalis L. var. pseudoscaber (Grec.) Asch. & Graebn. and the two cultivars of A. officinalis L., Rutgers Beacon and Mary Washington, showed high levels of infection. Most other taxa showed low levels of infection. Seven of these were classed as highly resistant: A. asparagoides (L.) W.F. Wight; A. compactus Salter; A. densiflorus (Kunth) Jessop cv. Myers; A. densiflorus (Kunth) Jessop cv. Sprengeri; A. larcinus Burch.; A. verticillatus L. and A. virgatus Bak. These species are considered to be potential sources of resistance for breeding commercial cultivars resistant to Stemphylium leaf spot.