

Mini data sheet on *Acremonium cucurbitacearum*, *Monosporascus cannonballus*
and *Rhizopycnis vagum*

Added in 1999 - Deleted in 2001

Reasons for deletion

Doubts were expressed about the distribution of *Acremonium cucurbitacearum*, *Monosporascus cannonballus* and *Rhizopycnis vagum* in the EPPO region (probably already present). It was concluded that they did not have the characteristics of quarantine pests. In 2001, they were therefore removed from the EPPO Alert List.

Acremonium cucurbitacearum, *Monosporascus cannonballus*, *Rhizopycnis vagum* (sudden collapse of melons and watermelons)

Why	<i>Acremonium cucurbitacearum</i> , <i>Monosporascus cannonballus</i> and <i>Rhizopycnis vagum</i> came to our attention because they cause a severe soil-borne disease (sudden collapse) of melons and watermelons of increasing incidence in many parts of the world. <i>Monosporascus eutypoides</i> is proposed as a synonym of <i>M. cannonballus</i> . <i>A. cucurbitacearum</i> was recently described as a new <i>Acremonium</i> species pathogenic to cucurbits in Spain. A third species, <i>Rhizopycnis vagum</i> has also recently been described from diseased melons. It is thought that these fungi are pathogenic to cucurbits and induce similar symptoms, but that they may occur under slightly different ecological conditions.
Where	<i>M. cannonballus</i> was first described in 1974 in Arizona. It is now reported from different parts of the world. EPPO region: Israel (as <i>M. eutypoides</i> , 1983), Italy (Gennari <i>et al.</i> , 1999), Libya (as <i>M. eutypoides</i> , 1978), Spain (Lobo Ruano, 1991), Tunisia (Martyn <i>et al.</i> , 1994). Intercepted in the Netherlands on cucumber plants from Russia (details given during the meeting of the Panel on Phytosanitary Measures) Asia: India, Iran (as <i>M. eutypoides</i>), Japan (Watanabe, 1979), Pakistan (as <i>M. eutypoides</i>), Saudi Arabia (Karlatti <i>et al.</i> , 1997), Taiwan (Tsay & Borkay, 1995). North America: Mexico (Martyn <i>et al.</i> , 1996), USA (Arizona, California, Texas). Central America: Guatemala (Bruton & Miller, 1997a), Honduras (Bruton & Miller, 1997b). <i>A. cucurbitacearum</i> occurs in Spain and California (US). <i>R. vagum</i> occurs in Texas and California (US).
On which plants	Melons (<i>Cucurbita melo</i>) and watermelons (<i>Citrullus lanatus</i>). Other cucurbits are reported as experimental hosts.
Damage	Yellowing, death of the leaves, decline of the plants as they approach maturity. Rapid collapse of the crops just before harvest. Root lesions.
Pathway	Infected soil, plants for planting from infected countries.
Possible risks	These fungi appear to be adapted to hot and semi-arid conditions. The Mediterranean region is especially concerned by these pathogens (suitable conditions, cucurbits are widely grown there in the field). Serious losses are reported. Control of the disease appears difficult (soil fumigation).
Source(s)	Aegerter, B.J.; Gordon, T.R.; Davis, R.M.; (2000) Occurrence and pathogenicity of fungi associated with melon root rot and vine decline in California. <i>Plant Disease</i> , 84(3), 224-230. Bruton, B.D.; Miller, M.E. (1997a) Occurrence of vine decline diseases of muskmelon in Guatemala. <i>Plant Disease</i> , 81(6), p 694. Bruton, B.D.; Miller, M.E. (1997b) Occurrence of vine decline diseases of melons in Honduras. <i>Plant Disease</i> , 81(6), p 696. CABI (1991) IMI Descriptions of Fungi and Bacteria, nos 1035 & 1036 (<i>Monosporascus cannonballus</i> & <i>M. eutypoides</i>). CABI, Wallingford, UK. Cohen, R.; Pivonia, S.; Shtienberg, D.; Edelstein, M.; Raz, D.; Gerstl, Z.; Katan, J. (1999) Efficacy of fluazinam in suppression of <i>Monosporascus cannonballus</i> the causal agent of sudden wilt of melons. <i>Plant Disease</i> , 83(12), 1137-1141. Edelstein, M.; Cohen, R.; Burger, Y.; Shriber, S.; Pivonia, S.; Shtienberg, D. (1999) Integrated management of sudden wilt in melons, caused by <i>Monosporascus cannonballus</i> , using grafting and reduced rates of methyl bromide. <i>Plant Disease</i> , 83(12), 1142-1145. Gennari, S.; Mirotti, A.; Sportelli, M. (1999) [<i>Monosporascus cannonballus</i> on watermelon]. <i>Informatore Fitopatologico</i> , no. 1/2, 38-40.

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- INTERNET
- South Texas Vegetable Web (pictures). <http://aggie-horticulture.tamu.edu/southtex/info/watermelon.html>
- University of Arizona, Extension Plant Pathology (pictures)
<http://ag.arizona.edu/PLP/plpext/diseases/vegetables/melon/melonvd.htm>
- Texas A & M University, Department of Plant Pathology and Microbiology (pictures)
http://cygnus.tamu.edu/PLPA/projects/1/monosporascus_cannonballus.html
- Data sheet on *Monosporascus cannonballus*.
http://www.extento.hawaii.edu/kbase/crop/Type/m_cann.htm

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