

مقاله کوتاه

Phytophthora melonis *Pythium aphanidermatum*

THE ROLE OF *Pythium aphanidermatum* AND *Phytophthora melonis* IN ROOT AND CROWN ROT ON GREENHOUSE CUCUMBER IN YASOUJ

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Pythium

Phytophthora melonis *aphanidermatum*

Ph. melonis *P. aphanidermatum*

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Ph. melonis

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aphanidermatum

aphanidermatum

P. aphanidermatum

P. aphanidermatum

Pythium aphanidermatum *Phytophthora melonis*

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Ph. melonis (Ho 1986)
Ph. drechsleri
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(Banihashemi and Mirtalebi 2006)

Rahimian and)
P. aphanidermatum (Banihashemi 1979)

Ph. drechsleri Ph. melonis
(Postma *et al.* 2000)
P. aphanidermatum
(Moormam *et al.* 2002)

P. aphanidermatum
(Mansoori and Banihashemi 1982)
Ph. drechsleri
Ohio MR 17

P. dissotocum P. irregulare P. aphanidermatum
P. myriotylm P. ultimum P. heterothallicum
(Howard *et al.* 1994.)

P. ultimum (Shrifi-Tehrani *et al.* 1996)

P. ultimum P. aphanidermatum
P. regulare

(Kreutzer 1937) *Ph. capsici*
(Katsura 1968)

(Hausbeck and Lamour 2004)

Ph. capsici

(Ho *et al.* 1984)

(Herrero *et al.* 2008)

Ph. capsici

Ph. drechsleri

Ph. melonis Ph. drechsleri

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(Kannwischer and Mitchell 1981) CMA-PARP

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.(Banihashemi and Fatehi 1989)

.(Ribeiro 1978)

.(Erwin and Ribeiro 1996)

(Mostowfizadeh-Ghalamfarsa, *et al.* 2005)

(Banihashemi and Mirtalebi 2006)

.(Banihashemi 2004)

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P. aphanidermatum *Ph. melonis*

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P. aphanidermatum Ph. melonis

Table 1. Sources of isolates of *Ph. melonis* and *P. aphanidermatum* on greenhouse cucumber in Yasouj

Source	Location	No. of isolate	Species
(Crown)	Chenarestan	2	<i>Ph. melonis</i>
(Root and Crown)	Sharaf-Abad	1	<i>Ph. melonis</i>
(Root and Crown)	Dashteroom	3	<i>Ph. melonis</i>
(Crown)	Sareabtaveh	1	<i>Ph. melonis</i>
(Root and Crown)	Sepidar	2	<i>Ph. melonis</i>
(Crown)	Naregah	1	<i>Ph. melonis</i>
(Root and Crown)	Akbar-Abad	3	<i>P. aphanidermatum</i>
(Crown)	Karim-Abad	2	<i>P. aphanidermatum</i>
(Root and Crown)	Vezeq	1	<i>P. aphanidermatum</i>
(Crown)		2	<i>P. aphanidermatum</i>
(Crown)	Mazeh-Kharideh Khalaf-Abad	2	<i>P. aphanidermatum</i>
(Root and Crown)	Mokhtar	3	<i>P. aphanidermatum</i>
(Root and Crown)	Ali-Abad	2	<i>P. aphanidermatum</i>

P. aphanidermatum

(Rahimian and Banihashemi 1979)

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P. aphanidermatum

Ph. melonis P. aphanidermatum

Ph. melonis

(Mansoori and Banihashemi 1982)

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Ohio MR 17

Ph. Melonis

P. aphanidermatum

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Ph. melonis *P. aphanidermatum***Table2. Comparison of percent root and crown colonization and dead seedling means in cucumber cultivars with two isolates of *P. aphanidermatum* and *Ph. melonis* using Duncan 's multiple range test ($P \leq 0.01$)**

Cultivar	Speacies	Crown rot(%)	Dead seedling(%)	Root rot(%)
Katrina	<i>P. aphanidermatum.</i>	94/1a	95/9a	94/35a
	<i>Ph. Melonis</i>	34/41f	42/5e	39/9e
Mehr	<i>P. aphanidermatum.</i>	93/8a	90/22ab	80/58b
	<i>Ph. Melonis</i>	21/5h	26/5g	34/8f
Bahman	<i>P. aphanidermatum.</i>	82/74b	89/11ab	82/3b
	<i>Ph. Melonis</i>	43/9d	59/84c	45/62d
Negin	<i>P. aphanidermatum.</i>	81/64b	90/1ab	81/2b
	<i>Ph. melonis</i>	30/2fg	37/1ef	38/88e
Fadia	<i>P. aphanidermatum.</i>	80/9b	88/15ab	79/4bc
	<i>Ph. Melonis</i>	44/21d	58/84c	44/41d
Cina	<i>P. aphanidermatum.</i>	78/42bc	88/4ab	78/5bc
	<i>Ph. Melonis</i>	39/71e	47/72d	40/9e
Close	<i>P. aphanidermatum.</i>	79/1bc	81/1b	79/3bc
	<i>Ph. melonis</i>	20/9h	27/32g	35/2f

Pythium *Phytophthora**P. aphanidermatum**Ph. melonis*

.(Duniway 1974)

Esmaili-Shirazifard)

and Banihashemi, 2008; Banihashemi and
.(Mirtalebi, 2006

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Mostowfizadeh-Ghalamfarsa *et al.*)

Ph. melonis

.(2005

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