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*Nattrassia mangiferae*

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PDA

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PDA

*Nattrassia mangiferae*

*Nattrassia mangiferae* :

(*Phoenix dactylifera* L.)

(*Palmaceae*)

*Nattrassia mangiferae* (Sydow & Sidow)

Sutton & Dyko

:

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PDA

*Hendersonula*

*Dothiorella mangiferae*

*toruloidea* Nattrass

(.)

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*H. toruloidea*

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*N. mangiferae*

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*Aspergillus* *Bipolaris australiensis*

*Bipolaris*

spp

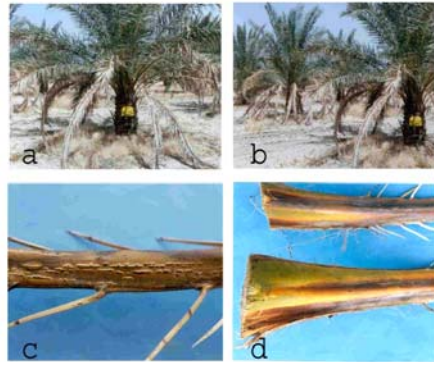
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... *Natrassia mangiferae*

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N.

*mangiferae*



(a)  
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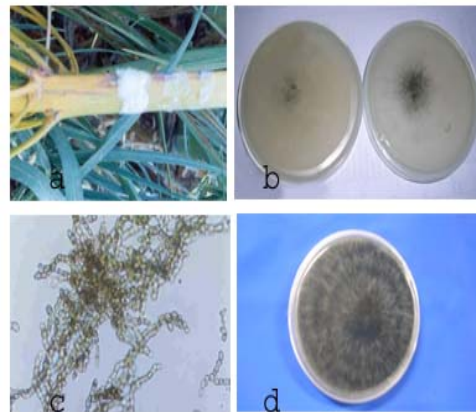
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(a)

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No.	Date	Geographical region	Cultivars	Isolated fungi
1	4/7/2001	Ghale Ganj	Mazafati	<i>Aspergillus flavus</i>
2	4/7/2001	Ghale Ganj	Mazafati	<i>Aspergillus flavus</i>
3	4/7/2001	Ghale Ganj	Mazafati	<i>Nattrassia mangiferae</i>
4	4/7/2001	Ghale Ganj	Mazafati	<i>Nattrassia mangiferae</i>
5	4/7/2001	Ghale Ganj	Mazafati	<i>Aspergillus niger</i>
6	4/7/2001	Ghale Ganj	Mazafati	<i>Aspergillus flavus</i>
7	4/7/2001	Ghale Ganj	Mazafati	<i>Aspergillus niger</i>
8	4/7/2001	Sorkh Ghale	Mazafati	<i>Aspergillus flavus</i>
9	4/7/2001	Sorkh Ghale	Mazafati	<i>Aspergillus flavus</i>
10	4/7/2001	Sorkh Ghale	Mazafati	<i>Aspergillus niger</i>
11	4/7/2001	Sorkh Ghale	Mazafati & Kaloteh	<i>Aspergillus niger</i>
12	4/7/2001	Tarikmah	Kaloteh	<i>Aspergillus niger</i>
13	4/7/2001	Zehkalot	Mazafati	<i>Nattrassia mangiferae</i>
14	4/7/2001	Sorkh Ghale	Mordarsang	<i>Nattrassia mangiferae</i>
15	4/7/2001	Ghale Ganj	Khorosi	<i>Nattrassia mangiferae</i>
16	4/7/2001	Ghale Ganj	Ghorbani	<i>Nattrassia mangiferae</i>
17	11/7/2001	Zehkalot	Kaloteh & Mazafati	-
18	11/7/2001	Zehkalot	Mazafati	<i>Nattrassia mangiferae</i>
19	11/7/2001	Roodbar	Mazafati	-
20	11/7/2001	Roodbar	Mazafati	<i>Nattrassia mangiferae</i>
21	11/7/2001	Roodbar	Mazafati	<i>Aspergillus niger</i>
22	11/7/2001	Zehkalot	Mazafati	<i>Aspergillus niger</i>
23	10/8/2001	Dehkahan	Shahani	-
24	10/8/2001	Dehkahan	Unknown	-
25	1/8/2001	Zahmakan	Kaloteh	-
26	1/8/2001	Zahmakan	Mazafati	-
27	1/8/2001	Moordan	Kaloteh	-
28	1/8/2001	Block-Chahnarenj	Mazafati	<i>Nattrassia mangiferae</i>
29	15/7/2001	Somali	Mazafati	<i>Aspergillus niger</i>
30	15/7/2001	Mohammadabad Kalantar	Mazafati	<i>Nattrassia mangiferae</i>
31	15/7/2001	Mohammadabad Kalantar	Mazafati	<i>Nattrassia mangiferae</i>
32	15/7/2001	Mohammadabad Kalantar	Kaloteh	<i>Nattrassia mangiferae</i>
32	30/7/2001	Sorkh Ghale	Mazafati	<i>Aspergillus niger</i>
34	15/7/2001	Hosseiniabad Olia	Mazafati	<i>Aspergillus niger</i>
35	11/7/2002	Bagherabad	Mazafati	<i>Nattrassia mangiferae</i>
36	11/7/2002	Dolatabad	Mazafati	<i>Nattrassia mangiferae</i>
37	11/7/2002	Anbarabad	Mazafati	<i>Aspergillus niger</i>
38	11/7/2002	Dolatabad	Mazafati	<i>Nattrassia mangiferae</i>
39	15/7/2001	Dehshikh	Mordarsang	<i>Nattrassia mangiferae</i>
40	15/7/2001	Bahrami	Mazafati	<i>Aspergillus niger</i>
41	11/7/2002	Gomrekan	Mazafati	-
42	11/7/2002	Kharposht	Mazafati	-
43	11/7/2002	Bagh lashkar-jiroft	Mazafati	-
44	16/5/2002	Azizabad-Bam	Mazafati	<i>Aspergillus niger</i>
45	16/5/2002	Rigan-Rahmatabad	Mazafati	<i>Nattrassia mangiferae</i>
46	16/5/2002	Rigan-Bam	Mazafati	<i>Bipolaris australiensis</i>
47	16/5/2002	Rigan-Bam	Mazafati	<i>Nattrassia mangiferae</i>
48	16/5/2002	Rodab-Bam	Mazafati	<i>Nattrassia mangiferae</i>
49	16/5/2002	Ghaderabad (Bam)	Mazafati	<i>Aspergillus niger</i>
50	16/5/2002	Ghaderabad (Bam)	Mazafati	<i>Nattrassia mangiferae</i>
51	16/5/2002	Nartig Saberi (Bam)	Mazafati	<i>Nattrassia mangiferae</i>
52	15/7/2001	Dehpush Sofla	Kaloteh	<i>Bipolaris australiensis</i>
53	4/7/2001	Ghale Ganj	Mazafati & Kaloteh	<i>Nattrassia mangiferae</i>

## REFERENCES

1. Ahmed, J.M. 1973. New hosts of *Hendersonula toruloidea*. FAO Plant Protection Bulletin, 21: 40-42.
2. Calavan, E.C., Wallace, J.M. 1954. *Hendersonula toruloidea* Natrass on citrus in California. Phytopathology, 44: 635-639.
3. Davison, A.D. 1972. Factors affecting development of madrone canker. Plant Disease Reporter, 59: 899-902.
4. English, H., Davis, J.R., & DeVay, J.E. 1975. Relationship of *Botryosphaeria dothidea* and *Hendersonula toruloidea* to a canker disease of almond. Phytopathology, 65:114-122.
5. Foot, J.H., Hendrickson, A.H., Wilson, E.E. 1955. Walnut branch wilt. California Agriculture, 9: 11.
6. Giha, O.H. 1975. *Hendersonula toruloidea* associated with a serious wilt disease of shade trees in the Sudan. Plant Disease Reporter, 59: 50-52.
7. Harsh, N.S.K., Jamaluddin, K. & Tiwari, C.K. 1992. Top dying and mortality in provenance trial plantations of *Gmelina arborea*. Journal of Tropical Forestry, 8:55-61.
8. Jamaluddin, K.K. Soni, K. & Dadwal, V.S. 1987. Some noteworthy diseases of *Eucalyptus* in Madhya Pradesh. Indian Journal of Forestry, 10 (1):55-57.
9. Jayasinghe, C. K., & Silva, P. K. 1994. Foot canker and sudden wilt of *Hevea brasiliensis* associated with *Natrassia mangiferae*. Plant Pathology, 43: 938-940.
10. Matheron, M. E. 1994. First report of Eucalyptus dieback caused by *Natrassia mangiferae* in North America. Plant Dis., 78:432(Abst.)
11. Minassian, V., Alizadeh, A. & Heidarian, A. (1997). Citrus dieback and death by *Natrassia mangiferae* in Khuzestan, Iran. Proceeding of International Conference on Integrated Plant Disease Management, 11- 15. Nov. 1997 New Delhi.
12. Mirzaee, M.R., M Mohammadi, H Rahimian. 2002. *Natrassia mangiferae*, the Cause of Die-Back and Trunk Cankers of *Ficus religiosa* and Branch Wilt of *Psidium guajava* in Iran. Journal of Phytopathology 150 (4-5), 244–247.
13. Moore, M.K. 1988. Morphological and physiological studies of isolates of *Hendersonula toruloidea* Natrass cultured from human skin and nail samples. Journal of Medical and Veterinary Mycology, 26: 25-39.
14. Msikita, W., Bissang, B., James, B. D., Baimey, H., Wilkinson. H. T., Ahounou, M. & Fagbemissi, R. 2005. Prevalence and severity of *Natrassia mangiferae* root and stem rot pathogen of Cassava in Benin. Plant Dis., 89:12-16.
15. Najafinia, M., Azadvar, M. 2006. Leaf Die – back of date palm by *Natrassia mangiferae*. Third International Date Palm Conference, Abu Dhabi, UAE; 19-21 Februry, 2006(Abstr.).
16. Natour, R.M., EI-Haideri, H. 1967. Occurrence of branch wilt disease caused by *Hendersonula toruloidea* in Iraq. Plant Disease Reporter, 51:371-373.
17. Natrass, R.M. 1933. A new species of *Hendersonula* (*H. toruloidea*) on deciduous trees in Egypt. Transactions of the British Mycological Society, 18:189-98.
18. Pandey, R.S., Bhargava, S.N., Shukla, D.N., & Khati, D.V.S. 1981. A new leaf spot disease of mango. Plant Disease, 65:441-442.
19. Paxton, J.D., & Wilson, E.E. 1965. Anatomical and physiological aspects of branch wilt disease in Persian walnut. Phytopathology, 55: 21-26.
20. Paxton, J.D., Wilson, E.E., Davis, J.R. 1964. Branch wilts disease of fig caused by *Hendersonula toruloidea*. Plant Disease Reporter, 48: 142.

21. Reckhaus, P. 1987. *Hendersonula* dieback of Mango in Niger. *Plant Dis.*, 71: 1047(Abst).
22. Sangoyomi, T.E., & Ekpo, E. J. A. 2002. First report of *Nattrassia mangiferae* as a postharvest fungal pathogen of White Yam (*Dioscorea rotundata*) in Nigeria. *Plant Dis.*, 86: 919(Abst.).
23. Sommer, N.F. 1955. Sun burn predisposes walnut trees to branch wilt. *Phytopathology*, 45:607-613.
24. Sutton, B.C., & Dyko, B.J. 1989. Revision of *Hendersonula*. *Mycological Research*, 93:466-488.
25. Tsahouridou, P. C., & Thanassouloupoulos, C. C. 2000. First report of *Hendersonula toruloidea* as a foliar pathogen of Strawberry tree (*Arbutus unedo*) in Europe. *Plant Dis.*, 84: 487(Abst.).
26. Wangikar, P.D., Raut, J.G., Gopalkrishna, N. 1969. Dying of grape-vines caused by *Hendersonula toruloidea*. *Indian Phytopathol.* 22: 403.