

NEW RECORDS OF *PYTHIUM* SPECIES IN PAKISTAN

SALEEM SHAHZAD* AND ABDUL GHAFFAR

Department of Botany,
University of Karachi, Karachi-75270, Pakistan.

The genus *Pythium* Pringsh., includes many plant pathogenic species which cause damping-off and root rot disease on important crops resulting in severe losses (Plaats-Niterink, 1981). Although reports of fungi like *Macrophomina phaseolina* (Tassi) Goid, *Rhizoctonia solani* Kühn, *Fusarium* spp., *Sclerotium* spp., and *Sclerotinia* spp., attacking under ground parts of crop plants in Pakistan have been made (Mirza & Qureshi, 1978; Shahzad & Ghaffar, 1986, 1990; Shahzad *et al.*, 1988), *Pythium* spp., have received little attention. Of over 120 species of *Pythium* (Dick, 1990), *P. aphanidermatum* (Edson) Fitzpatrick from *Capsicum annuum* L. and unidentified *Pythium* sp., from soil have been reported from Pakistan (Mirza & Qureshi, 1978). During a survey of cultivated fields in different parts of Pakistan, *P. aphanidermatum* and *P. periplocum* Drechsler were isolated and identified after reference to Plaats-Niterink (1981) and Dick (1990). There does not appear to be any previous report of *P. periplocum* from Pakistan (Mirza & Qureshi, 1978). *P. periplocum* was recorded on 5 host

Table 1. *Pythium* species associated with different host plants in Pakistan.

Fungus	Host	Locality
<i>P. aphanidermatum</i> (Edson) Fitzpatrick	<i>Capsicum annuum</i> L.	Mirpurkhas
	* <i>Cicer arietinum</i> L.	Karachi
	* <i>Vigna mungo</i> (L.) Hepper	Karachi
	* <i>V. radiata</i> (L.) Wilczek	Karachi
* <i>P. periplocum</i> Drechsler	** <i>Capsicum annuum</i> L.	Mirpurkhas
	** <i>Cicer arietinum</i> L.	Karachi
	** <i>Piper betel</i> L.	Karachi
	** <i>Vigna mungo</i> (L.) Hepper	Karachi
	** <i>V. radiata</i> (L.) Wilczek	Karachi

* = New record for Pakistan.

** = New host of the fungus not hitherto recorded.

* Present Address: Govt. Degree College, Block 7, Gulshan-e-Iqbal, Karachi, Pakistan.

plants which appear to be new hosts of the fungus not hitherto reported (Plaats-Niterink, 1981). Of the 4 hosts of *P. aphanidermatum*, *Cicer arietinum* L., *Vigna mungo* (L.) Hepper and *V. radiata* (L.) Wilczek appear to be new hosts of the fungus in Pakistan (Table 1).

References

- Dick, M.W. 1990. *Keys to Pythium*. Department of Botany, School of Plant Sciences, University of Reading, Reading, UK. 64 pp.
- Mirza, J.H. and M.S.A. Qureshi. 1978. *Fungi of Pakistan*. Dept. of Plant Pathology, Univ. of Agriculture, Faisalabad. 311 pp.
- Plaats-Niterink, A.J. Vander. 1981. *Monograph to the genus Pythium*. *Studies in Mycology No. 21*. Centraalbureau voor Schimmelcultures, Baarn. 242 pp.
- Shahzad, S. and A. Ghaffar. 1986. *Macrophomina phaseolina* (Tassi) Goid, on some new hosts in Pakistan. *FAO Plant Protection Bull.*, 34: 163.
- Shahzad, S. and A. Ghaffar. 1990. Addition to the hosts of *Rhizoctonia solani* in Pakistan. *Pak. J. Agric. Res.*, 22: 221-222.
- Shahzad, S., A. Sattar and A. Ghaffar. 1988. Addition to the hosts of *Macrophomina phaseolina*. *Pak. J. Bot.*, 20: 151-152.

(Received for Publication 7 July 1993)