

POSTHARVEST DISEASES OF PERISHABLES IN WEST BENGAL.
INDIA 4. NEW RECORDS OF FUNGAL DISEASES

During a survey of postharvest diseases of perishables in different markets of West Bengal in 1977 and 1978, several pathogens and postharvest diseases of fruits and vegetables have been recorded for the first time in West Bengal. The survey was conducted in Kolay, Mechuabazar and College Street markets in Calcutta, and Sriniketan, Bolpur, and Bankura markets. The materials and methods have been described by Mandal and Dasgupta (1980, 1982). and the results are presented in Tables 1 and 2.

The present report includes twelve new fungi from West Bengal, twenty fungi recorded as postharvest pathogens, 55 postharvest diseases new to West Bengal, and twenty-one more hosts from India. Some new names of diseases have been proposed on the basis of characteristic symptoms for quick diagnosis. With this report there are 127 diseases of perishables in West Bengal.

The senior author is grateful to the Council of Scientific & Industrial Research for awarding him a Junior Research Fellowship during the tenure of which the work has been done. Authors are grateful to the Director, CMI, Kew and his colleagues for identification of most of the specimens.

Table 1. New postharvest diseases of fruits from West Bengal

Pathogen	Disease	IMI No.	Host
1. <i>Alternaria alternata</i> Fr. (Keissler) ^a	Circular brown spot *	229025	Apple ³
2. <i>Aspergillus flavus</i> Link ex Ries	Green mould rot	216218	Mandarine orange ³
3. —do—	Distal end rot *	216653	Pomegranate ⁵
4. <i>A. niger</i> Van Tiegh.	Black mould rot	216210	Banana ⁵
5. —do—	—do—	234168	Litchi ⁴
6. —do—	—do—	216211	Pomegranate ⁵
7. —do—	—do—	229007	Apple ⁵
8. —do—	—do—	216208	Kagji lime ³
9. —do—	—do—	not sent	Pear ⁴
10. —do—	—do—	—do—	Guava ⁵
11. —do—	Dry surface rot *	233792	Amla (Amloki) ⁴

Pathogen	Disease	IMI No.	Host
12. <i>Botryodiplodia theobromae</i> Pat.	Stem end rot	216267	Kagji lime ⁴
13. —do—	—do—	216246	Mange ³ (green) * *
14. —do—	—do—	226894	Guava ⁴
15. —do—	—do—	216247	Litchi ⁴
16. —do—	Brown stem end rot	231299	Sapota ⁴
17. —do—	—do—	233798	Pummelo ⁴
18. —do—	—do—	Not sent	Mandarin orange ⁴
19. —do—	Polar rot	233796	Sweet orange ³
20. —do—	Black rot	216264	Ber (Kul) ⁵
21. —do—	—do—	216249	Pear ³
22. —do—	Black soft rot *	229017	Papaya (green)
23. —do—	—do—	234534	Papaya (ripe) ⁴
24. <i>Cladosporium tenuissimum</i> Cooke ^{1, 2}	Green ball rot *	231300	Grape ⁵
25. <i>Geotrichum candidum</i> Link ex Pers. ^{1, 2}	Sour rot	233987	Kagji lime ³
26. —do—	—do—	233992	Mandarine orange ⁵
27. <i>Glomerella cingulata</i> (Stonem.) Spauld. & Schrenk. <i>Colletotrichum state</i> ¹	Anthracnose	216638	Kagji lime ¹
28. —do—	—do—	229001	Guava ⁴
		231305	Mandarine orange ⁵
29. —do—	—do—	Not sent	Lady's finger ³
30. <i>Rhizopus oryzae</i> Went & Prinsen Geerlings	Shrivelled bulb rot *	216243	Garlic ⁴
31. <i>R. stolonifer</i> (Ehren. ex Fr.) Lind.	Soft rot	216647	Sweet potato ⁵
32. —do—	—do—	Not sent	Tomato ⁵
33. —do—	Soft watery rot	—do—	Bitter gourd ⁵
34. —do—	Soft curd rot *	216648	Cauliflower ⁵
35. —do—	Black soft rot	Not sent	Onion ⁵
37. <i>Sclerotium rolfsii</i>	Creepy white rot *	216250	Carrot ³
37. —do—	Gray white fruit rot *	231321	Bitter gourd
38. —do—	Creepy white rhizome rot *	Not sent	Ginger ³
39. <i>Pythium butleri</i> Subramaniam ¹²	Cottomy leak	Not sent	Lady's finger ³

* New names proposed to characterize diagnostic symptoms

1. Fungi first recorded as pathogens of postharvest diseases from West Bengal.

2. Fungi recorded for the first time from West Bengal.

3. Diseases causing 20% economic loss.

4. Diseases causing up to 20% economic loss.

5. Diseases causing 5-10% economic loss.

Table 2. New postharvest diseases of vegetables from West Bengal.

No.	Pathogen	Disease	IMI No.	Host
1.	<i>Alternaria alternata</i> (Fr.) Keissler	Brown spongy rot *	216228	Brinjal ⁵
2.	—do—	Black rot	216223	Tomato ³
3.	—do—	—do—	216227	Broad bean ⁴
4.	—do—	Black ripe rot *	216230	Chilli ⁴
5.	—do—	Black curd rot *	226899	Cauliflower ⁴
6.	<i>A. brassicicola</i> (Schw) Wiltshire ^{1 2}	Target leaf spot	Not sent	Cabbage ⁵
7.	<i>Aspergillus flavus</i> Link ex Fr.	Yellow mould rot	216215	Tomato ⁵
8.	—do—	—do—	234172	Pumpkin
9.	<i>A. nigr</i> Van Tiegh.	Yellow soft rot	Not sent	Hog plum (Spondias mangifera) ⁴
10.	—do—	Black mould rot	216200	Tomato ⁴
11.	—do—	Black mould blemish *		
12.	<i>Botryodiplodia theobromae</i> Pat.	Stem end rot	216209	Garlic ⁴
13.	<i>Corynespora cassiicola</i> (Burk. and Curt.) Wei ¹	Halo spot	233802	Hogplum ⁵
14.	<i>Fusarium equiseti</i> (Corda) Sacc. ^{1 2}	Cottony pink rot *	234353	Tomato ⁴
15.	<i>F. oxysporum</i> Schlecht	Soft rot	226917	Tomato ⁵
16.	—do—	Cottony white rot *	216285	Chilli
17.	—do—	—do—	226902	Beet ⁴
18.	<i>F. solani</i> (Mart.) Sacc.	—do—	216268	Ginger ⁴
19.	—do—	Dry rot		Tomato ⁴
20.	<i>Geotrichum candidum</i> Link ex Pers.	Sour rot	226633	Arum ⁴
21.	—do—	—do—	216255	Tomato ⁴
22.	<i>Glomerella cingulata</i> (Stomen.) Spauld. & Schrenk. ^{1 2}	Anthraxnose	226902	Brinjal
23.	<i>Macrophoma phaseolina</i> (Tassi) Goid	Charcoal rot	234352	Carambola ⁵
24.	—do—	—do—	234549	Radish ⁴
25.	—do—	—do—	233810	Sweet potato ⁴
26.	—do—	—do—	233811	Potato ⁵
27.	<i>Myrothecium roridum</i> Tode ex Fr. ¹	Internal bulb rot *	233809	Garlic
28.	<i>Phoma destructiva</i> Plowr.	Wooly black rot *	234548	Tomato
29.	<i>Pythium butleri</i> Subramaniam ^{1, 2}	Sunken black spot *	229015	Tomato
30.	<i>Macrophoma mangiferae</i> Hingorani & Sharma ^{1, 2}	Corky nasal end rot *	233812	Mango
31.	<i>Nigrospora oryzae</i> (Berk. & Br.) Petch state of <i>Khuskia oryzae</i> <i>oryzae</i> Hudson ¹	Squinter disease	229021	Banana
		Blue mold rot		

	Disease	IMI No.	Host
32. <i>Penicillium expansum</i> Link ex S. F. Gray ^{1 2}	Red spot and scab	234005	Pear ⁴
33. <i>Pestalotiopsis psidii</i> (Pat.) Mordue	Brown discolouration	231310	Guava
34. <i>Phomopsis natsume</i> Hara ^{1, 2}	Wrinkled rot *	229026	Ber (Kul) ⁵
35. <i>P. phyilanthi</i> Punithalingam ^{1, 2}	Stylar end rot *	233814	Amla (Amlaki) ⁴
36. <i>P. psidii</i> Nag Raj and Ponappa ^{1, 2}	Soft rot	229003	Guava
37. <i>Rhizopus oryzae</i> Went & Prinsen Geerlings ^{1 2}	—do—	Not sent —do—	Banana ⁵ Mango ⁴
38. —do—	—do—	—do—	—do—
39. <i>R. stolonifer</i> (Ehren. ex Fr.) Lind.	—do—	—do—	Grape ⁵
40. —do—	—do—	—do—	Pomegranate
41. —do—	—do—	—do—	Pear ⁵
42. —do—	—do—	216649	Banana ⁵
43. —do—	Core rot	Not sent	Mandarin orange ⁵
44. —do—	Soft watery rot *	—do—	Sour lime
45. —do—	Black cottony rot *	—do—	Jackfruit ⁴
46. <i>Sclerotium rolfsii</i>	Soft rot	216251	Mandarin orange ⁵

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** Loss on ripe fruits recorded.

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