SHORT SCIENTIFIC NOTES

Some Additions to Indian Ascomycetes

A number of ascomycetous fungi were collected in the year 1976 during survey of ascomycetous fungi of Bhagalpur, Bihar. They were sent to C.M.I., Kew, England, for identification. Out of these five were found to be unrecorded from India. So they are listed below with their hosts and locality. This is the first report of their occurrence in India.

1. *Clathridium corticola* (Fckl.) Shoemaker and Muller (IMI–209198).
   On dead twigs of *Clitoria ternatea* L. from Botanical Garden, Bhagalpur University, Bhagalpur.
2. *Ophiobolus spirosporus* Ahmad (IMI–207754).
   On submerged and living leaves, leaf sheaths and stems of *Saccharum spontaneum* L., Zoological tank, Bhagalpur University, Bhagalpur.
3. *Didymosphaeria oblitescens* (Berk and Br.) Fckl. (IMI–209197).
   On dead twigs of *Premna mucronata*, Botanical Garden, Bhagalpur University, Bhagalpur.
4. *Lophiostoma vagans* Fabre. (IMI–207751).
   On dead twigs of *Jasminium sambac* Ait., Botanical Garden, Bhagalpur University, Bhagalpur.
5. *Lophiostoma angustilabrum* (Berk and Br.) Cke. (IMI–209205).
   On dead twigs of *Solidago* sp., Botanical Garden, Bhagalpur University, Bhagalpur.

The author expresses his gratefulness to the Director, C.M.I., Kew, England, for identification and to Professor K. S. Bilgrami, Head, P.G. Department of Botany, Bhagalpur University, for necessary laboratory facilities.

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Diplodia carissae Ahmad on *Carissa*—A New Record for India

During November 1973 a severe leafspot disease was observed at Khargone on the foliage of the *Carissa carandas* Linn. The synptoms were observed only on leaves. Both the surfaces of affected leaves bore irregular, necrotic spots, measuring several cm. in diameter and covered almost half of the leafblade. The fungus was identified as *Diplodia carissae* Ahmad. Repeated isolations of the fungus on Potato-Dextrose-Agar (P.D.A.) confirmed the association of *Diplodia carissae* Ahmad with the lesions. The herbarium material has been deposited under IMI No. 177822. *Diplodia carissae* is a new fungus record for the country[1–3] and *Carissa carandas*, a new host record.

The author is grateful to Dr. Punithalingam of Commonwealth Mycological Institute, Kew, England, for confirming the identity of the fungus and to Dr. G. P. Agarwal, Head, Department of Postgraduate Studies and Research in Botany, University of Jabalpur, Jabalpur, for encouragement and advice.

Department of Botany, R. C. Rajak.
Government Science College,
Jabalpur, *August* 25, 1976.

1. Butler, E. J. and Bisby, G. R., *The Fungi of India* (Revised by R. S. Vasudeva), I.C.A.R., New Delhi, 1960, p. 512.
2. Tandon, R. N. and Chandra, S., *The Fungi of India, Supplement to the List of Indian Fungi*, University, Allahabad Studies, Allahabad, 1963 p. 246.
3. Mukerji, K. G. and Juneja, R. C., *Fungi of India, Supplement to the List of Indian Fungi*, Emkay Publications, Delhi, 1975, p. 224.

Fungi Associated with Rai (*Brassica juncea* Hook. f. & Thoms). Seeds

Rai is economically important crop, the seeds of which are used as condiments and in various medicines. In the present investigation, therefore, it has been intended to study the fungi associated with rai seeds, which play a vital role in biodeterioration of seeds.

For the surface mycoflora, the surface washings (washed the seed surface sterilized with double distilled water) of unsterilized seeds were plated on blotter paper, Czapeck's-dox-agar and potato-dextrose-agar mecia separately. For internal mycoflora, the seeds were sterilized (with 0·1% $HgCl_2$ solution) and plated on above media separately as followed by ISTA (Anonymous, 1966)[1]. All the plates were incubated at 25 ± 2° C for a week. Of the 17 fungal ioslates obtained in this way *Aspergillus flavus* Link ex Fries, *A. niger* Van Tieghem *A. tamarii* Kita, *A. terreus* Thom., *Alternaria* sp., *Cladosporium herbarum* (Pers.) Link and *Penicillium* sp. isolate No. 1 were found associated both ecto and endophytically. *Aspergillus flavus*, *A. luchuensis* Inui, *A. sulphureus* (Fres) Wehmer, *A. versicolor* (Vuill.) Tiroboschi, *Alternaria tenuis* Nees (Sacc), *Cladosporium herbarum*, *Cunninghmella* sp., *Curvularia* sp., *Fusarium semitectum* Berkeley and Ravenel, *Fusarium* sp., *Helminthosporium* sp. and

Penicillium sp. isolate No. 2 were found only in endophytic association.

The isolates were identified by comparing their characteristics with those of the stalk cultures maintained at the Department and also comparing them with the type descriptions available.[2-4]

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August 30, 1976.

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2. Barnett, H. L., *Illustrated Genera of Imperfect Fungi*. Burgess Publishing Co., 426 S. Sixth Street, Minneapolis 15, Minn. (Second edition). 1960.
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Two New Diseases of Grape Berries

Phoma macrostoma Mont. and *Cladosporium tenuissimum* Cooke were found to be associated with the decay of grape berries (*Vitis vinifera* L.) in storage and transit at Allahabad. The decay caused by both the fungi appeared through the stalk-end or growth cracks on the fruits. Pycnidia of *P. macrostoma* and cottony growth of *C. tenuissimum* were observed on the infected berries. No single fruit was found to be infected simultaneously by both the organisms. The losses caused by *P. macrostoma* as well as *C. tenuissimum* varied 2–6%. Wangikar *et al.*[1] recorded *Cladosporium oxysporum* on grape berries, but the above organisms have not been reported on fruits of *V. vinifera* from India.

The author is thankful to the Director, C.M.I., Kew, England, for confirming the identity of both the organisms (No. IMI, 199042 and 199041 respectively).

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Bhagalpur-7, *October* 28, 1976.

JAMALUDDIN.

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REVIEWS AND NOTICES OF BOOKS

Annual Review of Phytopathology (Vol. 14), Editor: K. F. Baker, Associate Editors: G. A. Zentmyer and E. B. Cowling (Annual Reviews, Inc., 4139, Elcaminoway, Paloalto, California 94306, U.S.A.), 1976. Pp. 1–511, 22 × 14·5 cms. Price: $ 17.00, Elsewhere $ 17.50.

This 14th volume in the series includes a prefatory chapter followed by Historical perspectives, Appraisal of plant disease, Pathogens, Morphology and Anatomy, Physiology of host-pathogen interaction, Genetics of host-pathogen interaction, Epidemiology, Influence of environment, Chemical control, Biological and cultural control, Breeding for resistance, Special topics, finally ending with the Indexes. The prefatory chapter which consists of four essays by Vanderplank whose photograph forms the frontispiece are particularly interesting and thought provoking. An important additional feature of this volume is a chapter on special topics which includes the plant disease clinic, fossil fungi and electrophysiological research in plant pathology. Though information on fossil fungi may not appear significant, a careful study of this topic shows, as rightly concluded by Pirozynski, that the fossil fungi can serve a potential as interpreters of past environments and this will be realised only after a coordinated study of fossil and modern fungi is undertaken.

As usual, the various chapters in this volume have been extremely well written by specialists in the field and as rightly put forward in the preface, the *Annual Review of Phytopathology* has definitely served in the analytical synthesis of an expert to highlight significant progress and to show the remaining gaps.

Finally, Dr. Vanderplank while concluding his four masterly essays (p. 10) effectively points out that "The twin features of science, the publication explosion and ever-increasing specialization are going to make us need the *Annual Review* more and more". The present volume thus amply justifies the statement. This volume without hesitation must find a place in all institutions where phy opathological studies are carried out.

K. SUBRAMANYAM.

Annual Reviews of Physical Chemistry, Vol. 27. (Annual Reviews Inc., California), 1976, Pp. vii + 630. Price: USA $ 17.00, Elsewhere $ 17.50.

Annual Reviews of Physical Chemistry has been a valuable publication of high quality since its inception. The present volume is no exception. This is