



संहती कार्यसाधिका । शिलं परं भूषणम्
Shetkari Shikshan Prasarak Mandal's

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Key Indicator 3.3 – Research Publication and Awards

3.3.2: Number of books and chapters in edited volumes/books published and papers published in national/ international conference proceedings per teacher during year 2019-20.

Sr. No.	Name of the teacher	Title of the book/chapters published	National / International	Year of publication	ISBN/ISSN number of the proceeding	Affiliating Institute at the time of publication	Name of the publisher
1	Dr. C. B. Salunkhe	Foliicolous Black Mildew Fungi from Mahabaleshwar (Western Ghats)	International	2019	978-3-659-56555-7	Krishna Mahavidyalaya, Rathare Bk	LAMBERT Academic publishing. Germany
2	Dr.S.H.Jadhav	A Handbook of Practical Botany for B. Sc. II, As per Revised Syllabus of Shivaji University, Kolhapur	National	2019	978-81-908298-6-1	Krishna Mahavidyalaya, Rathare Bk	Tejas Publication, Kolhapur
3	Dr.P.D.Bhakre	Introduction to ScTD	State	2019	978-93-89327-08-3	Krishna Mahavidyalaya, Rathare Bk	Shivaji University, Kolhapur, Distance Education

4		BA- I, Human Geography, Population_Principal Author	State	2019	978-93-89327-09-0.	Krishna Mahavidyalaya, Rathare Bk	Shivaji University, Kolhapur, Distance Education
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Black Mildew's are the very specific group of ascomycetous fungi having interesting miro-morphological characters. Tiny colonies on living leaves show microscopic ornamental structures. Though, Western Ghats of India are not much explored, appears to be hub for these types of fungi, especially Mahabaleshwar, which is known for tourist place and its huge biodiversity. Present work is the systematic documentation of black mildew's representing to contemporary research in mycology highlighting issues of untapped diversity and ecology of Black mildews fungi. Each taxon is well described with appropriate line drawings, photo-micrographs, identification key, and specific ecological note. The mounting technique of the black mildews is interesting and speciality of this work. As such, this work provides a baseline data to ease their identification in the field, as well as in the laboratory. This work will become asset for the researchers, teachers, students and foresters.

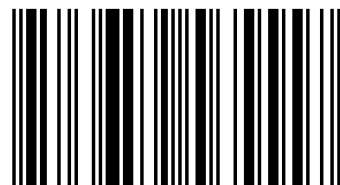
BLACK MILDEW FUNGI FROM MAHABALESHWAR



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Dr. Mahendra Bhise is presently as Assistant Professor at L. K. D. K. Banmeru Science College, Lonar, Dist. Buldana (M.S.). Studied in Botany (Mycology & Plant Pathology) at the Pune University, Pune & successfully completed his Ph.D. in Fungal Taxonomy from Shivaji University, Kolhapur. He is interested in Taxonomy of Black Mildews.



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Foliicolous Black Mildew Fungi From Mahabaleshwar (Western Ghats)

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**Mahendra Bhise
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CONTENTS

Chapter No.	Name of the Chapter	Page No.
I	INTRODUCTION	1-5
II	REVIEW OF LITERATURE	6-25
III	STUDY AREA	26-38
IV	MATERIALS AND METHODS	39-42
V	RESULTS	
	A) Systematic position of Black Mildew fungi groups	43
	B) Systematic Account	
	1. Meliolaceous Fungi	44-122
	2. Asterinaceous Fungi	123-184
	3. Schiffnerulaceous Fungi	185-209
	4. Fungi from family Parodiopsidaceae	210-214
VI	DISCUSSION	215-234
VII	SUMMARY AND CONCLUSIONS	235-237
	BIBLIOGRAPHY	238-255
	PUBLICATIONS	256
	APPENDIX-I	257-264
	APPENDIX-II	265-280

CHAPTER-I.

INTRODUCTION

The documentation of biodiversity, its conservation and sustainable utilization is the major theme of research in life sciences. However, the tropical and subtropical forests are considered to be the store house of the highest biodiversity on earth. It is estimated that, about 50 % of all species on the planet are from tropical rainforests that cover only 6 to 7 % of the earth's land surface (Connell, 1978). Nowadays, pollution and habitat destruction in tropical forests have resulted in the extinction of the microbial diversity. Each year, hundreds of species are being lost even before they are known to the scientific world. In order to conserve them, we need to know more about the various kinds of organisms that exist and co-exist with our forests.

Fungi are the 2nd largest group of organisms in the world and are characterized by eukaryotes, heterotrophs, and having absorptive type of nutrition (Hawksworth, 2001). They inhabit almost all kinds of ecosystems and usually, these are parasitic or saprophytic. They are an extremely important part of the ecosystem and have significant role in recycling of minerals and carbon; as a source of food, medicines and chemicals; as important models in scientific research; and have received much attention by scientific society as they cause plant and animal disease (Webster and Weber, 2007). There are about 1,20,000 fungal species known till date, although the total number of species estimated at around 1.5 million from the world (Hawksworth, 2001; Kirk *et al.*, 2001). So, probably 15 times of existing fungi have yet to be discovered and this shows that, the fungi are one of the least-explored biodiversity resources of our planet.

India stands the second largest tropical country in Asia, one among the 17 mega diversity centers in the world. In peninsular India, the 'Western Ghats' also called 'Sahyadri hills' is one among the biodiversity hot-spots in the world and recently included in the list of 'World Heritage Site' by UNESCO. The rich vegetation of this area provides major hosts for the parasitic fungi. India is the mega diversity center with rich vegetation and harbors more than 18,000 flowering plants and of which several are endemic. If we consider 1:10 ratio of plant to fungus, it has to be 1,80,000 plant parasitic or associated fungi instead of the presently known 27,000 species from the country (Manoharachary *et al.*, 2005; Hosagoudar, 2012). In comparison with existing phanerogamic flora, the number of fungi known from India seems too less, apparently due to the restricted exploration for fungi. Consequently, the fungal systematics started declining and now it has become rare to identify the common fungi (Hosagoudar, 1996, 2012). Therefore, the taxonomic study of the fungi is important and the researchers in the field of mycology have to pay attention to delimit the habitats, parasitic fungi and their hosts range (Ainsworth and Sussman, 1966).

The fungi which attack the cultivated plants or other plant pathogenic fungi caused major disease, leading to heavy loss of yield and attracting the attention of the investigators to study them thoroughly. On the other hand, several other groups of plant parasitic fungi, which are less destructive to the hosts, have received less attention as in the case of 'Black Mildews'. As these fungi are no important pathogens on any crop plants producing staple

A HANDBOOK OF PRACTICAL

BOTANY

For B. Sc. II

As per new CBCS syllabus of Shivaji University, Kolhapur



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Dr. M. N. Desai ■ Dr. S. H. Jadhav ■ Dr. M. S. Bansode

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87

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दूरशिक्षण केंद्र



वी. ए. भाग १

पेपर क्र. १ व २, सेमिस्टर १ व २

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(रीकॉपिक वर्ष २०१९-२० पाठ्यवर्ष)

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अभ्यास घटकांचे लेखक

लेखक	घटक क्रमांक
पेपर-१ : सत्र-१	
प्रा. प्रवीणचंद्र भाकरे कृष्णा महाविद्यालय, रेटोरे बुद्रूक.	१
श्री. जगन्नाथ दगडू बरकडे राजा श्रीपतराव भगवंतराव महाविद्यालय, औंध, ता. खटाव, जि. सातारा.	२
डॉ. रामराजे माने-देशमुख छत्रपती शिवाजी कॉलेज, सातारा.	३
डॉ. संभाजी ज्ञा. शिंदे भूगोलशास्त्र विभाग, शिवाजी विद्यापीठ, कोल्हापूर.	४
पेपर-२ : सत्र-२	
डॉ. पी. व्ही. पाटील प्रा. संभाजीराव कदम कॉलेज, देऊर, ता. कोरेगाव, जि. सातारा.	१
डॉ. एम. बी. पोतदार भूगोलशास्त्र विभाग, शिवाजी विद्यापीठ, कोल्हापूर.	२
डॉ. बी. एस. जाधव श्री विजयसिंह यादव आर्ट्स अँड सायन्स कॉलेज, पेटवडगाव.	३
डॉ. नेताजी महादेव पाटील दूधसाखर महाविद्यालय, बिद्री मौनीनगर, ता. कागल, जि. कोल्हापूर.	४

■ संपादक ■

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घटक क्रमांक

घटकाचे शीर्षक

पान क्रमांक

पेपर-१ : सेमिस्टर-१

१. विज्ञान आणि तंत्रज्ञानाचा परिचय	१
२. विज्ञान व तंत्रज्ञान विकासातील थोर शास्त्रज्ञांचे योगदान	३०
३. भारतातील अपारंपारिक साधनसंपत्ती	५१
४. विज्ञान तंत्रज्ञान आणि मानवी आरोग्य	८२

पेपर-२ : सेमिस्टर-२

१. आपत्ती व्यवस्थापन	१०३
२. दळणवळणाची साधने आणि माहिती तंत्रज्ञान	१२०
३. अवकाश संशोधनातील विज्ञान आणि तंत्रज्ञान	१४५
४. भारतीय संरक्षण व सागर संशोधनातील विज्ञान व तंत्रज्ञान	१७६



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दूरशिक्षण केंद्र



बी. ए. भाग-१ : (ऐच्छिक भूगोल)
सत्र १ : पेपर १ : प्राकृतिक भूगोल
सत्र २ : पेपर २ : मानवी भूगोल

(शैक्षणिक वर्ष २०१९-२० पासून)

दूरशिक्षण केंद्र,
शिवाजी विद्यापीठ,
कोल्हापूर

प्राकृतिक भूगोल व मानवी भूगोल

अभ्यास घटकांचे लेखक

लेखक	घटक क्र.
पेपर-१ : सत्र-१ (प्राकृतीक भूगोल)	
प्रा. डॉ. ए. बी. पाटील कला आणि वाणिज्य महाविद्यालय, आष्टा, ता. वाळवा, जि. सांगली	१
डॉ. के. आर. जाधव क्रांतिसिंह नाना पाटील महाविद्यालय, वाळवा, जि. सांगली	२
डॉ. डी. एच. पवार भूगोल अधिविभाग, शिवाजी विद्यापीठ, कोल्हापूर	३
डॉ. बी. एस. जाधव श्री विजयसिंह यादव कला व विज्ञान महाविद्यालय, पेठवडगांव	४
पेपर-२ : सत्र-२ (मानवी भूगोल)	
डॉ. एस. डी. शिंदे भूगोल अधिविभाग, शिवाजी विद्यापीठ, कोल्हापूर	१
डॉ. पी. डी. भाकरे कृष्णा महाविद्यालय, रेठरे बु॥, ता. कराड, जि. सातारा	२
डॉ. सी. यु. माने बाळासाहेब देसाई कॉलेज, पाटण, ता. पाटण, जि. सातारा	१
डॉ. पी. व्ही. पाटील संभाजीराव कदम कॉलेज, देऊर, ता. कोरेगाव, जि. सातारा	४

■ संपादक ■

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सत्र १ : पेपर १ : प्राकृतिक भूगोल
सत्र २ : पेपर २ : मानवी भूगोल**

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शिवाजी विद्यापीठ,
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अभ्यास घटकांचे लेखक

लेखक	घटक क्र.
पेपर-१ : सत्र-१ (प्राकृतीक भूगोल)	
प्रा. डॉ. ए. बी. पाटील कला आणि वाणिज्य महाविद्यालय, आष्टा, ता. वाळवा, जि. सांगली	१
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पेपर-२ : सत्र-२ (मानवी भूगोल)	
डॉ. एस. डी. शिंदे भूगोल अधिविभाग, शिवाजी विद्यापीठ, कोल्हापूर	१
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पेपर-२ : सत्र-२ (मानवी भूगोल)	
डॉ. एस. डी. शिंदे भूगोल अधिविभाग, शिवाजी विद्यापीठ, कोल्हापूर	१
डॉ. पी. डी. भाकरे कृष्णा महाविद्यालय, रेठरे बु।।, ता. कराड, जि. सातारा	२
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वाळवा, जि. सांगली