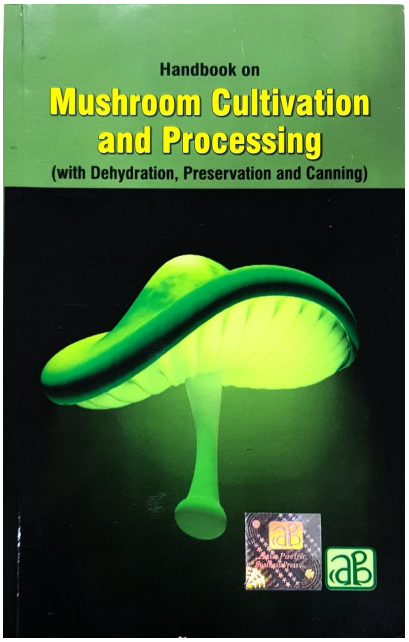
Entrepreneur India

106-E, Kamla Nagar, New Delhi-110007, India.
Tel: 91-11-23843955, +91 9097075054
Mobile: +91-9097075054
Email: npcs.ei@gmail.com, info@entrepreneurindia.co
Website: www.entrepreneurIndia.co



Handbook on Mushroom Cultivation and Processing (with Dehydration, Preservation and Canning)

Code	NI164
Format	paperback
Indian Price	₹1275
US Price	$125
Pages	544
ISBN	9788178330341

Publisher	Asia Pacific Business Press Inc.

Description

Mushrooms are the health food of the world. These are that fast growing basidiomycetous fungi which produce fleshy fruit bodies. They are rich in proteins, vitamins and minerals, so they are consumed as energy rich food. Mushroom has been attracting attention of mankind since ancient times and use of mushroom, as food is as old as human civilization. Mushrooms are superior to many vegetables and beans in their nutritive value. It is very rich in protein, vitamins and minerals. Fresh mushrooms contain about 85% water and 3.2% protein. But dried mushrooms water content is low and protein level is high as 34 to 44% and the fat content is less than 0.3%. There are about 100 species of edible mushrooms all over the world. But only three of them are cultivated in India which are Agaricus bisporus, Volvariella volvacea and pleurotus sajor caju. Unfortunately, it is realized that mushrooms did not receive universal acceptance over the years since a number of naturally growing mushrooms are poisonous. Now the situation has been changed because the cultivated edible mushrooms are totally safe for human consumption. Mushroom cultivation fits in very well with sustainable farming and has several advantages: it uses agricultural waste products, a high production per surface area can be obtained, after picking; the spent substrate is still a good soil conditioner. They have less carbohydrate so they are believed to be suitable for diabetic patients. Fresh mushrooms have very limited life and hence they need to be consumed within few hours. But processing and canning increases their shelf life to few months. Osmotic dehydration is one of the important methods of processing mushroom which involves drying technology of mushroom. Mushrooms are very popular in most of the developed countries and they are becoming popular in many developing countries like India. Applications and market for mushrooms is growing rapidly in India because of their nice aroma, nutritious values, subtle flavour and many special tastes. Mushroom cultivation has been declared as a major thrust area by Government of India. Mushroom dish is a common item in all the big hotels. Mushroom production has increased many folds during the recent past. Mushrooms have found a definite place in the food consumption habits of common masses and there is a constant demand for it throughout the year.
Some of the fundamentals of the book are nutritive value of edible mushrooms, medicinal value of mushrooms, advantages of mushrooms, symptoms of mushroom poisoning, morphology of common edible mushrooms, classification of fungi a brief survey, chemical composition, anti nutritional factors and shelf life of oyster mushroom , osmotic dehydration characteristics of button mushrooms, mushroom cultivation, cultivation of white button mushroom (agaricus bisporus), actors determining the amount of spawn needed, fungidues for mushroom diseases insectides for mushroom

pets etc.
The present book contains cultivation, processing, dehydration, preservation and canning of various species of mushrooms. It is resourceful book for agriculturists, researchers, agriculture universities, consultants etc.

Content

1. NUTRITIVE VALUE OF EDIBLE MUSHROOMS
2. MEDICINAL VALUE OF MUSHROOMS
3. ADVANTAGES OF MUSHROOMS
How to Avoid Discomfort While Eating Mushrooms?
4. POISONOUS MUSHROOMS
Distinctive Features of Poisonous Mushrooms
Symptoms of Mushroom Poisoning
How to Avoid Mushroom Poisoning
5. MORPHOLOGY OF COMMON EDIBLE MUSHROOMS
Agaricus Bisporus
Volvariella Volvacea
Pleurotus Sajor-caju
6. COMMON EDIBLE MUSHROOMS OF INDIA
7. WHERE AND WHEN TO GO MUSHROOMING
8. HOW TO COLLECT AND IDENTIFY FUNGI
Steps in the Description of Macro-and Micro-characteristics
of Gill Fungi
(Mode of development)
9. CLASSIFICATION OF FUNGI - A BRIEF SURVEY
Fungi
Ascomycetes
Basidiomycetes
Deuteromycetes-Fungi Imperfecti
10. DELICIOUS RECIPES OF MUSHROOM
Mushroom omelette
Stuffed Potatoes
Mushrooms on Toast
Mushroom Soup
Mushroom Pakoras
Mushroom Pulao
Mushroom Pickle 1
Mushroom pickle 2
Mushrooms and Peas

Mushrooms and Paneer
Mushroom Samosa
Liver with Mushroom
11. CHEMICAL COMPOSITION, ANTI-NUTRITIONAL FACTORS AND SHELF-LIFE OF OYSTER MUSHROOM (PLEUROTUS OSTREATUS)
Material and Methods
Results and Discussion
Conclusion
12. COMPOSITION AND FOOD VALUE OF SCLEROTIUM (OSU) AND EDIBLE MUSHROOM (PLEUROTUS TUBER-REGIUM)
Conclusion
13. OSMOTIC DEHYDRATION CHARACTERISTICS OF BUTTON MUSHROOMS
Materials and Methods
Results and Discussion
14. EFFECT OF MODIFIED ATMOSPHERE PACKAGING ON LOW MOLECULAR WEIGHT CARBOHYDRATES OF OYSTER MUSHROOMS
Materials and Methods
Results and Discussion
15. MUSHROOM CULTIVATION
Advantages of mushroom cultivation
Comparison of nutritive value of mushrooms with other foods
Salient features of mushroom cultivation
Importance of mushroom cultivation for India
Types suitable for cultivation
16. CULTIVATION OF WHITE BUTTON MUSHROOM (AGARICUS BISPORUS)
Temperature
Moisture
Ventilation
Good Spawn
Suitable Growing Space
Compost and Methods of Composting
Nature and Quality of the Basic Material
Organic and Inorganic Supplements
Management of the Compost During Composting
Long Method
Short Method
A Compost Fermentation Method by Means of
Forced Air Circulation
Fermentation Chamber for Compost
Formulation of Compost
Process of Composting and Fermentation

Mechanical composting
Loading the Barrel
Composting Cycle
Spawn and Methods of Spawning
Advantages of Grain Spawn
Disadvantages of Grain Spawn
Methods of Preparation of Grain Spawn
Agaricus bisporus
Volvariella volvacea
Factors Determining the Amount of Spawn Needed
Method of Spawing
Storage of Spawn
Casing
Sterilisation of Casing Soil
Chemical Sterilisation
Time of Casing
Cropping and Harvesting
Diseases
Soft Mildew or Cobweb (Dactylium dendroides)
Brown plaster mould (Papulospora byssina)
White plaster mould (Scopulariopsis fumicola)
Olive green mould (Chaetomium olivacearum)
Inky cap (Coprinus lagopus and C. comatus)
Green Mould (Trichoderma viride)
Truffle disease (Pseudobalsamia microspora)
Bubble disease (Mycogone perniciosa)
Dry Bubble, Brown Spot Disease
(Verticillium malthousei or V. psiallistae)
Bacterial Blotch (Pseudomonas tolaassi)
Virus Diseases
Control
Insect Pests
Sciarids
Phorids
Spring tails
Cecid
Mites
Nematodes
Control
Fungidues for Mushroom Diseases Insectides for Mushroom Pets
Abnormalities of Mushrooms

Rose comb
Long stalked mushroom
Scaly and cracked mushroom
Open Mushrooms
Stroma
Preservation
Storage in Fresh Conditions
Controlled Atmosphere
Preservation by Gamma Radiation
Freeze Drying
Steeping preservation
Dehydration of Mushrooms
Canning of Mushroom
Doâ€™s and Donâ€™ts of Mushroom Growing
Mushroom Farm Design
Construction and Insulation
Peak Heating Chamber/bulk Chamber/tunnel
Initial Consideration/Work Plan
Casing Pasteurization Chamber
Economically Viable Commercial Button Mushroom Unit
Economics
Fixed costs
Variable Costs
Economics of Canned Product
17. CULTIVATION OF AGARICUS BITORQUIS
Harvesting
False truffle (Diehliomyces microspora)
Control
Bacterial Blotch and Pests
Control
18. CULTIVATION OF PADDY STRAW MUSHROOM (VOLVARIELLA SPP.)
Diseases and Pests
Preservation
Canning
Economics of Production of Paddy Straw Mushroom
19. CULTIVATION OF PLEUROTUS SPP.
Method of Cultivation
Preparation of Spawn
Cultivation
Economics of Pleurotus Cultivation in Hells on a Small Scale
20. CULTIVATION OF STROPHARIA RUGOSO ANNULATA

Cultivation
Layout of Beds
Production and Planting of Spawn
Cropping
Harvesting
21. CULTIVATION OF AURICULARIA SPP. (JEWâ€™S EAR)
Laying of logs
Cropping yard
Bag method cultivation
Harvesting
22. CULTIVATION OF FLAMMULINA VELUTIPES
Cultivation
Spawn
Spawning and Cropping
23. CULTIVATION OF PHOLIOTA NAMEKO
Moisture, light and aeration
Japanese Method
Spawn
Inoculation
Laying
Raising
Cropping
Taiwan Method of Cultivation
Construction of plastic mushroom growing houses
Preparation of sawdust medium
Bagging and sterilization of medium
Inoculation and incubation
Fruiting
Cropping
Mori
Ham
Song
Royse
Difference between bag method and log method of cultivation
Important factors
24. TYPES OF MUSHROOMS
Orange Peel Fungus
Aleuria aurantia (Pers. ex Hook.) Fuckel
Otidea Onotica
(Batsch ex S.F. Gray) Fuckel
Sarcosphaera crassa

(Santi ex Steudel) Pouz
Discina Perlata (Fr.) Fr
Lorchel, Turban Fungus
Gyromitra esculenta (Pers. ex Pers.) Fr
Common White Helvella, False Morel
Helvella Crispa (Scop.) ex Fr.
Common Morel
Morchella esculenta Pers. ex St. Amans
Morchella Elata Fr
Early Morel
Verpa bohemica (Krombh.) Schroet
Choiromyces venosus
(Fr.) Th. Fries
Summer Truffle, Common (English) Truffle
Tuber aestivum Vitt
Winter Truffle
Tuber Brumale Vitt
Elaphomyces Granulatus Fr
Common Earth-ball
Scleroderma citrinum Pers
Pisolithus Arrhizus
(Pers.) Rauschert
Astraeus hygrometricus
(Pers.) Morg
Cyathus Striatus
(Huds.) ex Pers
Sphaerobolus Stellatus
Tode ex Pers
Bovista Nigrescens
Pers. ex Pers
Common Puffball
Lycoperdon perlatum Pers. ex Pers
Giant Puffball
Langermannia gigantea (Batsch ex Pers.) Rostk
Geastrum triplex Jungh
Wood Witch, Stinking Polecat, Stinkhorn
Phallus impudicus L. ex Pers
Hysterangium Graveolens Velen
Anthurus archeri
(Berk.) E. Fischer
Blackening Russula

Russula nigricans (Bull. ex Merat) Fr.
Common Yellow Russula
Russula ochroleuca (Pers.) ex Fr.
Cracked Green Russula
Russula Virescens (Schaeff. ex Zanted.) Fr.
Bare-toothed Russula
Russula vesca Fr.
Russula Cyanoxantha
(Schaeff. ex Schw.) Fr.
Grass Green Russula
Russula aeruginea Lindbl. in Fr.
Russula Olivacea
(Schaeff. ex Secr.) Fr.
Russula Mustelina Fr.
Russula Xerampelina
(Schaeff) ex. Fr. (S. Str.)
Russula integra
(L. ex Hook.) Fr.
Russula paludosa Britz
Sickener
Russula emetica (schaeff. ex Fr.) S.F. Gray
Russula sanguinea
(Bull. ex St. Amans) Fr.
Lactarius piperatus
(Fr.) S. F. Gray
Fleecy Milk Cap
Lactarius vellereus (Fr.) Fr.
Woolly Milk Cap
Lactarius torminosus (Schaeff. ex. Fr.) S. F. Gray
Saffron Milk Cap
Lactarius deliciosus (L. ex Fr.) S. F. Gray
Lactarius helvus (Fr.) Fr.
Lactarius volemus (Fr.) Fr.
Strobilomyces floccopus
(Vahl ex Fr.) P. Karst.
Porphyrellus pseudoscaber
(Sect.) ex Sing.
Gyroporus castaneus
(Bull. ex Fr.) Quel.
Boletus cavipes
Klotzsch in Fr.

Boletus variegatus
Bow. ex. Fr.
Gyrodon lividus
(Bull. ex Fr.) Sacc
Suillus grevillei
(Klotzsch) Singer
Suillus viscidus Fr.
Suillus placidus
(Bonorden) Sing.
Slippery Jack
Suillus luteus (L. ex Fr.) S. F. Gray
Suillus fluryi Huijsm
Suillus granulatus
(L. ex Fr.) O. Kuntze
Phylloporus rhodoxanthus
(Schw.) Bres
Xerocomus parasiticus
(Bull. ex Fr.) Quel.
Xerocomus rubellus
(Krombh.) Quel.
Bay Boletus
Xerocomus badius (Fr.) Gilb.
Red-cracked Boletus
Xerocomus chrysenteron (Bull ex St. Amans) Quel
Xerocomus subtomentosus
(L. ex Fr.) Quel.
Xerocomus porosporus Imler
Chalciporus piperatus
(Bull. ex Fr.) Sing
Boletus Lupinus Fr. SS. Romagnesi
Red-stalked Boletus
Boletus erythropus (Fr. ex Fr.) Krombh.
Boletus Luridus
Schaeff. ex Fr.
Devilâ€™s Boletus
Boletus satanas Lenz
Boletus Impolitus Fr.
Boletus aereus Bull. ex Fr.
Boletus Aestivalis
(Paulet) ex Fr.
Edible Boletus, Cepe

Boletus edulis Bull. ex Fr.
Bitter Boletus
Tylopilus felleus (Bull. ex Fr.) P. Karst.
Krombholziella Aurantiaca
(Bull. ex St. Amans) R. Maire
Krombholziella Rufescens
(Konr.) Sut.
Krombholziella Oxydabilis (Sing.) Sut.
Brown Birch Boletus
Krombholziella Scabra (Bull. ex Fr.) R. Maire
Paxillus involutus
(Batsch ex Fr.) Fr.
Paxillus Atrotomentosus
(Batsch ex Fr.) Fr.
False Chanterelle
Hygrophoropsis aurantiaca (Wulf. ex Fr.) R. Maire
Omphalotus Olearius
(DC. ex Fr.) Sing.
Gomphidius Roseus
(Fr.) P. Karst.
Gomphidius Glutinosus
(Schaeff. ex Fr.) Fr.
Chroogomphus Rutilus
(Schaeff. ex Fr.) O.K. Miller
Ivory Wax Cap
Hygrophorus eburneus (Bull. ex Fr.) Fr.
Goat Moth Wax Cap
Hygrophorus Cossus (Sow. ex Fr.) Fr.
Pinewood Wax Cap
Hygrophorus Hypothejus (Fr.) Fr.
Hygrophorus marzuolus
(Fr.) Bres.
Camarophyllus Pratensis
(Pers. ex Fr.) Kumm.
Hygrocybe nigrescens
(Quel.) Kuhner
Hygrocybe punicea
(Fr.) Kumm.
Omphalina epichysium
(Pres. ex Fr.) Quel.
Gerronema chrysophyllum

(Fr.) Sing.
Laccaria amethystina
(Huds. ex Hook) Cooke
Laccaria laccata
(Scop. ex Fr.) Cooke
Clitocybe odora
(Bull. ex Fr.) Kumm.
Clitocybe clavipes
(Pers. ex Fr.) Kumm.
Clitocybe geotropa
(Bull. ex St. Amans) Quel.
Clitocybe maxima
(F. Wett. ex Fr.) Kumm.
Common Funnel Cap
Clitocybe gibba (Pers. ex Fr.) Kumm.
Clitocybe cerussata
(Fr.) Kumm.
Clitocybe candicans
(Pers. ex Fr.) Kumm.
Clitocybe brumalis
(Fr. ex Fr.) Kumm.
Lepista nebularis
(Batsch ex Fr.) Harmaja
Wood Blewitt, Bluette, Blue Leg
Lepista nuda (Bull. ex Fr.) W. G. Smith
Blewitt, Bluette, Blue Leg
Lepista saeva (Fr.) P. D. Orton
Tricholomopsis rutilans
(Schaeff. ex Fr.) Sing.
Tricholoma caligatum
(Viv.) Ricken
Tricholoma colossus
(Fr.) Quel.
Tricholoma Fulvum
(DC. ex Fr.) Sacc.
Tricholoma Vaccinum
(Pers. ex Fr.) Kumm.
Tricholoma Portentosum
(Fr.) Quel.
Tricholoma flavovirens
(Pers. ex Fr.) Lund.

Tricholoma sejunctum
(Sow. ex Fr.) Quel.
Sulphurous Tricholoma
Tricholoma Sulphureum (Bull. ex Fr.) Kumm.
Tricholoma Columbetta
(Fr.) Kumm.
Tricholoma Terreum
(Schaeff. ex Fr.) Kumm.
Honey Fungus, Honey Agaric, Shoestring Mushroom
Armillaria mellea (Vahl. ex Fr.) Kumm.
Lyophyllum connatum
(Schum. ex Fr.) Sing
Lyophyllum fumosum
(Pers. ex Fr.) Orton
Tephrocybe atrata
(Fr. ex Fr.) Donk
St. Georgeâ€™s Mushroom
Calocybe gambosa (Fr.) Donk
Giant Clitocybe
Leucopaxillus giganteus (Sibth. ex Fr.) Sing.
Melanoleuca brevipes
(Bull. ex Fr.) Pat.
Catathelasma imperiale
(Fr.) Sing.
Wood Woolly-foot
Collybia Peronata (Bolt. ex Fr.) Kumm.
Russet Shank
Collybia Dryophila (Bull. ex Fr.) Quel.
Greasy Tough Shank
Collybia butyracea (Bull. ex Fr.) Quel.
Spotted Tough Shank
Collybia maculata (Alb. et Schw. ex Fr.) Kumm.
Hohenbuehelia Petaloides
(Bull. ex Fr.) Schulz.
Megacollybia Platyphylla
(Pers. ex Fr.) Kotl. et Pouz.
Slimy Beech Tuft
Oudemansiella mucida (Schrad ex Fr.) Hoehn.
Rooting Shank
Oudemansiella radicata (Relhan ex Fr.) Sing.
Strobilurus Esculentus

(Wulf. ex Fr.) Sing.
Little Wheel Toadstool
Marasmius rotula (Scop. ex Fr.) Fr.
Marasmius scorodonius (Fr.) Fr.
Fairy Ring Fungus, Fairy Ring Champignon, Scotch Bonnet
Marasmius oreades (Bolt. ex Fr.) Fr.
Lilac Mycena
Mycena pura (Pers. ex Fr.) Kumm.
Mycena rosea
(Bull.) ex Sacc. et Dalla Costa
Mycena fagetorum
(Fr.) Gill.
Xeromphalina campanella
(Batsch ex Fr.) R. Maire
Velvet Shank, Winter Fungus
Flammulina velutipes (Curt. ex Fr.) Sing.
The Miller
Clitopilus prunulus (Scop. ex Fr.) Kumm.
Nolanea verna
(Lundell) Kotl. et Pouz.
Livid Entoloma
Entoloma lividum (Bull. ex St. Amans) Quel.
Entoloma nidorosum
(Fr.) Quel.
Entoloma hirtipes
(Schum. ex Fr.) Moser
Volvariella speciosa
(Fr.) Sing.
Pluteus cervinus
(Schaeff. ex Fr.) Kumm.
Grisette
Amanita vaginata (Bull. ex Fr.) Vitt
Amanita umbrinolutea Secr.
Fly Agaric
Amanita muscaria (L. ex Fr.) Hook
Amanita regalis
(Fr.) Michael
Caesarâ€™s Mushroom, Imperial Mushroom
Amanita caesarea (Scop. ex Fr.) Grev.
Panther Cap
Amanita pantherina (DC. ex Fr.) Krombh.

Amanita gemmata
(Fr.) Gill.
Death Cap
Amanita phalloides (Fr.) Link
Destroying Angel
Amanita virosa (Fr.) Bertillon
False Death Cap
Amanita citrina (Schaeff) ex Roques
Amanita porphyrea
(Alb. et Schw. ex Fr.) Schummel
Amanita spissa (Fr.) Opiz
Blusher
Amanita rubescens (Pers. ex Fr.) S. F. Gray
Agaricus brunnescens Peck
Red-staining Agaric Wood Mushroom
Agaricus silvaticus (Schaeff. ex Krombh) Kumm.
Common Field Agaric, Meadow Mushroom
Agaricus campestris L. ex Fr.
Agaricus augustus Fr.
Agaricus abruptibulbus Peck
Horse Agaric, Horse Mushroom
Agaricus arvensis Schaeff. ex Fr.
Yellow Stainer
Agaricus xanthoderma Genev.
Lepiota cristata
(Alb. et Schw. ex Fr.) Kumm.
Lepiota clypeolaria
(Bull. ex Fr.) Kumm.
Parasol Mushroom
Macrolepiota procera (Scop ex Fr.) Sing.
Shaggy Parasol
Macrolepiota rhacodes (Vitt.) Sing
Macrolepiota excoriata
(Schaeff. ex Fr.) Acker-Sch.
Cystoderma amianthinum
(Scop. ex Fr.) Maubl
Cystoderma cinnabarinum
(Alb. et Schw. ex Fr.) Maubl
Shaggy Mane, Shaggy Cap, Lawyerâ€™s Wig
Coprinus Comatus (Mull. ex Fr.) S. F. Gray
Common Ink Cap

Coprinus atramentarius (Bull. ex Fr.) Fr.
Glistening Ink Cap
Coprinus micaceus (Bull. ex Fr.) Fr.
Panaeolus papilionaceus
(Bull ex Fr.) Quel.
Psathyrella candolleana
(Fr. ex Fr.) R. Maire
Psathyrella velutina
(Pers. ex S. F. Gray) Sing.
Yellow Cow-pat Toadstool
Bolbitius vitellinus (Pers. ex Fr.) Fr.
Agrocybe dura
(Bolt. ex Fr.) Sing.
Agrocybe praecox
(Pers. ex Fr.) Sing.
Stropharia rugosoannulata
Farlow in Murrill
Verdigris Agaric
Stropharia aeruginosa (Curt. ex Fr.) Quel.
Stropharia albonitens
(Fr.) P. Karst.
Brick Red Hypholoma, Bricktop, Bricktop Mushroom
Hypholoma sublateritium (Fr.) Quel.
Sulphur Tuft
Hypholoma fasciculare (Huds. ex Fr.) Kumm.
Hypholoma capnoides
(Fr. ex Fr.) Kumm.
Psilocybe semilanceata
(Fr. ex Weinm) Kumm.
Pholiota destruens
(Brond) Gill.
Shaggy Pholiota
Pholiota squarrosa (Pers. ex Fr.) Kumm.
Pholiota carbonaria
(Fr.) Sing.

Gymnopilus spectabilis
(Fr.) Sing
Gymnopilus sapineus
(Fr.) R. Maire
Kuehneromyces mutabilis

(Schaeff. ex Fr.) Sing. et Smith
Tubaria conspersa
(Pers. ex Fr.) Fayod
Crepidotus variabilis
(Pers. ex Fr.) Kumm.
Inocybe patouillardii Bres
Inocybe fastigiata
(Schaeff. ex. Fr.) Quel.
Inocybe argillacea
(Pers. ex Pers.) Sing.
Inocybe lacera
(Fr.) Kumm.
Hebeloma radicosum
(Bull. ex Fr.) Ricken
Jewâ€™s Ear, Judasâ€™ Ear
Hirneola auricula-judae (Bull. ex St. Amans) Berk.
Yellow Brain Fungus, Witches Butter
Tremella mesenterica Retz. ex Hook.
Yellow Chanterelle Pixie Stool
Cantharellus cibarius Fr. ex Fr.
Cantharellus tubaeformis
Bull. ex Fr.
Oyster Fungus, Oyster-cap Fungus, Oyster Mushroom
Pleurotus ostreatus (Jacq. ex Fr.) Kumm.
Lentinus Lepideus
(Fr. ex Fr.) Fr.
25. GLOSSARY OF BASIC MYCOLOGICAL TERMS

About Niir

NIIR Project Consultancy Services (NPCS) is a reliable name in the industrial world for offering integrated technical consultancy services. Its various services are: Pre-feasibility study, New Project Identification, Project Feasibility and Market Study, Identification of Profitable Industrial Project Opportunities, Preparation of Project Profiles and Pre-Investment and Pre-Feasibility Studies, Market Surveys and Studies, Preparation of Techno-Economic Feasibility Reports, Identification and Selection of Plant and Machinery, Manufacturing Process and/or Equipment required, General Guidance, Technical and Commercial Counseling for setting up new industrial projects and industry. NPCS also publishes various technology books, directories, databases, detailed project reports, market survey reports on various industries and profit making

business. Besides being used by manufacturers, industrialists, and entrepreneurs, our publications are also used by Indian and overseas professionals including project engineers, information services bureaus, consultants and consultancy firms as one of the inputs in their research.