

Diversity of Macro Fungi in Community Managed *Shorea robusta* Forests of Dhading District, Central Nepal

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Tribhuvan University,
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December, 2011

RECOMMENDATION

This is to certify that the dissertation work entitled "**Diversity of Macro Fungi in Community Managed *Shorea robusta* Forests of Dhading District, Central Nepal**" submitted by Ms. Shova Baral has been carried out under our supervision. The entire work is primarily based on the results of her research work and has not been submitted for any other degree. We recommend this dissertation work to be accepted for the partial fulfillment of Master of Science in Botany.

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ABSTRACT

Macro fungi are the high value resource of forests in the world. They are the macroscopic fruiting body which grows in getting favorable condition of moisture, temperature, humidity and soil nutrients. Ecological studies of macro fungi in forests has been quite rare in Nepal. Present study was made during August 2011 in six community managed sal (*Shorea robusta*) forests of Dhading district; three of them were managed for <10 years and another three for >10 years. Altogether 88 species of macro fungi were collected from the community forest which is managed for <10 years and 77 species from the community forests managed for >10 years. The largest family recorded from each of the forest categories is Polyporaceae followed by Clavariaceae. There was no significant difference in the species richness of macro fungi between two forest categories which differed in management duration. The proportion of saprophytic fungi was found to be higher in both the forest categories than mycorrhizal. Parasitic fungi were recorded in negligible number. Forest canopy, litter cover and relative radiation were found to be the important environmental factors which varied positively with the species richness of macro fungi in the study forests.

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PHOTO PLATE

ACRONYMS

m asl	meter above sea level
BCF	Bossikharka Community Forest
CF	Community Forest
CFUGs	Community Forest User Groups
DCF	Dhondre Community Forest
EM	Ecto- mycorrhizal
F	Frequency
GPS	Global Positioning System
JCF	Jungepakha Community Forest
KCF	Kirakhore Community Forest
RCF	Raatamata Community Forest
RRI	Refractive Radiation Index
SCF	Sikhrepakha Community Forest
sp.	Species
SPSS	Statistical Package for Social Science
VDC	Village Development Committee