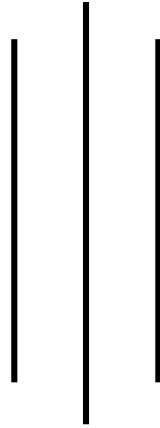
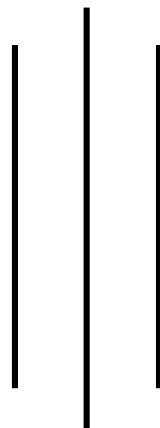


**CONTRIBUTION TO THE FLORA OF LOWER MANANG
(GYASUMDO) AND ITS ADJOINING AREAS, CENTRAL
NEPAL**



**A Dissertation Submitted for the Partial Fulfillment of the Requirement
for Master of Science in Botany**



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LETTER OF APPROVAL

This dissertation paper submitted by Mr. Kapil Adhikari entitled "**Contribution to the Flora of Lower Manang (Gyasumdo) and its adjoining areas, Central Nepal**" has been accepted as a partial fulfillment of Master's Degree in Botany.

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This is to certify that M. Sc. dissertation work entitled **Contribution to the Flora of Lower Manang (Gyasumdo) and its adjoining areas, Central Nepal** has been carried out by Mr. Kapil Adhikari under my supervision. The entire work is based on the field work and research and the results have not yet been published or submitted for any other degree. I recommended this dissertation work to be accepted as a partial fulfillment for Master's Degree in Botany.

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ABSTRACT

Floristic study was conducted in Gyasumdo and its adjoining area of Manang district, central Nepal to explore and document Angiospermic flora. The study area covers Gyasumdo area, lower part of Manang at altitudes from 1600m (Tal) to 3400m (Humde). Three field visits were made from June-October 2006.

Altogether from the present study area 245 species under 203 genera and 79 families including 5 varieties (2 species were identified upto generic level only) were identified and described upto the species level. Among them, 189 species of Dicotyledonae belong to 153 genera and 65 families and 56 species of Monocotyledonae belong to 50 genera and 14 families.

The study revealed four taxa as new record for Nepal. They are: *Calamagrostis lahulensis* G. Singh (Gramineae), *Oryzopsis aequiglumis* Duthie ex Hook. f. (Gramineae), *Cyperus squarrosus* L. (Cyperaceae), and *Platanthera edgeworthii* R. K. Gupta (Orchidaceae). Altogether 79 species were found having different altitudinal ranges than reported in *Hara et al.* (1978, 1979 and 1982) and *Press et al.* (2000). Likely 13 species were found having new locality to central Nepal.

The present study area was found to be dominated by Compositae with 30 species followed by Labiatae (22 species), Rosaceae (16 species), Gramineae (16 species), Orchidaceae (15 species), Leguminosae (14 species), Ranunculaceae (12 species), Polygonaceae (10 species), Scrophulariaceae and Cyperaceae (8 species each), Gentianaceae (7 species) and Umbelliferae (5 species).

The largest genera recorded were *Swertia* and *Elsholtzia* with 4 species each followed by *Geranium*, *Strobilanthes*, *Viburnum*, *Anaphalis* and *Carex* with 3 species each and so on. Two monotypic families Cannabaceae and Toricelliaceae were reported from the study area. The study area was dominated by the Eastern elements and differed from upper Manang which was dominated by Western elements in the horizontal distribution of floristic elements.

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ABBREVIATIONS AND ACRONYMS

ACAP	-	Annapurna Conservation Area Project
BM	-	British Museum of Natural History
CDB	-	Central Department of Botany
CGG	-	Botanic Garden of Cambridge University
DPR	-	Department of Plant Resources
E	-	Royal Botanic Garden, Edinburgh
G	-	Conservatoire at Jardin Botaniques de Geneve
G-DC	-	De Candolle Prodrromus herbarium, Dahlem
K	-	Royal Botanic Gardens, Kew
KATH	-	National Herbarium and Plant Laboratories
K-W	-	Wallich Herbarium at Kew
KYO	-	Herbarium of Kyoto University, Japan
LINN-SM	-	Linnen Society of London, New Zealand
L-W	-	Robert W. Freckmann Herbarium University of Wisconsin, Stevens point
MFSC	-	Ministry of Forests and Soil Conservation
NUFU	-	The Norwegian Council for Higher Education Programmes for Development Research and Education/Norway
NY	-	New York Botanical Garden
OXF	-	Ozarks Regional Herbarium
TU	-	Tribhuvan University
TUCH	-	Tribhuvan University Central Herbarium
VDC	-	Village Development Committee
⁰ c	-	centigrade
Acad.	-	Academy
Am.	-	American
Apr.	-	April
As.	-	Aisa(tic)
Aug.	-	August
Beng.	-	Bengali
Brit.	-	British

Bull.	-	Bulletin
C	-	Central
Cat.	-	Catalogue
Chin.	-	China(ese)
cm	-	centimeter
E	-	East
Edinb.	-	Edinburgh
Eng.	-	English
Enum.	-	Enumeration
Fl.	-	flowering
Fr.	-	fruiting
Him.	-	Himalayan
Ind.	-	India(n)
J.	-	Journal
Jap.	-	Japan(ese)
Jul.	-	July
Jun.	-	June
m	-	meter
mm	-	millimeter
N	-	North
n.	-	number
Nep.	-	Nepal
PH	-	Herbarium Digital Library
R.	-	Royal
Rep.	-	Report
Repert.	-	Repertorium
Rev.	-	Revision, Revue, Revista
Sep.	-	September
Sik.	-	Sikkim
sp.	-	species
subsp.	-	subspecies
t.	-	Plate(s)
Tr.	-	Transaction
var.	-	varieties