SPECIES DIVERSITY AND DISTRIBUTION PATTERN OF TERRESTRIAL SNAILS IN CHAMPADEVI HILL FOREST

A Dissertation

Submitted for the Partial Fulfillment of requirement for the Master's Degree of Science in Zoology (Entomology)

By

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2010

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RECOMMENDATION

This is to recommend that the dissertation entitled **"Species Diversity and Distribution Pattern of Terrestrial Snails in Champadevi Hill Forest"** has been carried out by Miss Sunita Khatiwara for the partial fulfillment of M.Sc. degree in Zoology (Entomology). This original work was conducted under my supervision. To the best of my knowledge, this dissertation work has not been submitted for any other degree.

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LETTER OF APPROVAL

On the recommendation of supervisor Mr. Prem Bahadur Budha, this thesis submitted by Miss Sunita Khatiwara entitled **"Species Diversity and Distribution Pattern of Terrestrial Snails in Champadevi Hill Forest"** is approved for examination and submitted to the Tribhuvan University in partial fulfillment of requirement for Master's Degree of science in Zoology with special paper Entomology.

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The dissertation work submitted by Miss Sunita Khatiwara entitled **"Species Diversity and Distribution Pattern of Terrestrial Snails in Champadevi Hill Forest"** has been approved as a partial fulfillment of requirement for Master's degree of Science in Zoology (Entomology).

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Declaration by the Candidate

I hereby declare that the work presented in this Thesis has been done by myself and has not been submitted elsewhere for the award of any degree. All sources of information have been specifically acknowledged by reference to the authors or institution.

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ACKNOWLEDGEMENTS

With affection and appreciation, I acknowledge my supervisor Mr. Prem Bahadur Budha, lecturer, Central Department of Zoology, T.U. Kirtipur without his continuous and careful guidance this thesis would not be completed.

I am very much thankful to Dr. Anand Shova Tamrakar, former Head, Central Department of Zoology for providing all administrative help during the study period. My sincere thank goes to all my teachers of Central Department for their constant advices.

I am very grateful to my colleague Srijana Khanal who accompanied me in all my field works. I would like to acknowledge Mr. Ganesh Tamang, Lab boy of this department for assisting my field work in different community forests of Champadevi hill. Similarly other friends Sarala Chettri, Sudarshan Chettri, Prakash Sharma, Tika Dutta Sharma, D.K. Gurung, Mandip Chettri, Showrnima Shrestha, Tezina Maharjan, Durga Maharjan, Binod Bhattarai, Satyam K.C., Hemant Dhakal and Mahesh Limbu also helped me in some of the field trips.

I would like to express my sincere gratitude to my family, without whose continuous support this work could ever be carried out.

Finally I would like to thank Center for Biological Conservation Nepal for providing grant and laboratory facility in identifying land snail species.

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ABSTRACT

A total of 628 specimens representing ten families, 16 genera and 26 species were reported from Champadevi hill forests within an altitudinal range of 1400 to 2200m above sea level. Family Ariophantidae was the dominant group among all reported families containing 8 species following Cycloporidae (4), Helicarionidae (4), Diplommatinidae (2), Glessulidae (2), Camaenidae (2), Streptaxidae(1), Plectopylidae(1), Euconulidae(1) and Bradybaenidae(1). Bosan community forest occupied the highest number of species (17) than Champadevi (16) and Baghbhairab (15) Community Forest. The average number of specimens per plot was also highest (14) in Bosan Community Forest following Baghbhairab CF (7) and Champadevi CF (6). Reported land snail species shows that *Bensonies* sp. A and *Macrochlamys subjecta* were distributed throughout the altitudinal range from 1400m to 2200m. Many species were range restricted which were only confined to limited altitudinal range. *Cryptaustenia ovata* was found only at 1400m elevation range while *Sinoennea stenopylis* and *Ganessela* sp. were reported above 2200m elevation. The distribution range of *Theobaldius phenotopicus* was from 1600-2000m. But *Alycaeus digitatus* and *Macrochlamys* sp.B were reported about 1700m only, while *Rishetia longispira* and *Plectopylis minor* were not found above 1700m.

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