#### IN THE NAME OF GOD

# BIODIVERSITY STUDY OF AQUATIC COLEOPTERA IN CHESHMEH-YE-GHANBARI, AN AQUATIC HABITAT IN BAMOO NATIONAL PARK

#### BY

#### **HOJAT EGHBALI**

#### **THESIS**

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EVALUATED AND APPROVED BY THE THESIS COMMITTEE AS: Excellent

Massaimief. HOSSEINIE, Ph. D., ASST. PROF. OF BIOLOGY

(CHAIRMAN), SHIRAZ UNIVERSITY

Sh. losseniesh. HOSSEINIE, O., Ph. D., PROF. OF BIOLOGY,

SHIRAZ UNIVERSITY

.. A. BAHAODDINI, Ph. D., ASST. PROF. OF

BIOLOGY, SHIRAZ UNIVERSITY

. F. SHAD-DEL, Ph. D., ASSO. PROF. SCHOOL OF

VETERINARY MEDICINE

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# Dedicated to:

My dear mother

My wife

My brother

My sisters

My dear Maryam and Zohreh

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#### **ABSTRACT**

Biodiversity studies of aquatic Coleoptera (Insecta) in Cheshmehye-Ghanbari, an aquatic habitat in Bamoo National Park, Fars

by

### Hojat Eghbali

The community dynamics of aquatic Coleoptera (Insecta) in one of the spring-stream habitats of Bamoo National Park in Fars province called Cheshmeh-ye-Ghanbari is studied as a pilot project and model for acquaintance with and furthering the biodiversity studies on fauna of Iran. Sixteen species —populations out of nineteen of this community were already identified for their taxonomy and for their population dynamics except three, two of which were also identified down to the species level in this study and the other one—the only one in the community—remained identified down to the genus level.

The expertise acquaintance with the recognition of genera and species and their sex differentiation and their habitat was worked out and practiced –under the close supervision of experts- well prior to the starting of "field work" so that the identifications be done with precision and cautious certainty in the field, hence the animals collected could be released back to their home after the recordings. Mid-seasonal samplings of the whole system is taken for six seasons, from spring 1379 (2000) to summer 1380 (2001) removing all the populations from wherever they existed in every "microhabitat" and were safely released back after their genera, species, number of individuals and their males and females were recorded.

Results are tabulated in space—along the length of stream- and time—six mid-seasons- and in quality—species composition- and in quantity—number of individuals of each sex in each species in related tables. Some of these results are shown diagrammatically also. The status of coexistence of species pairs and species triplets is worked out statistically. The dynamics of the community and its nature are discussed. Further studies following this type of work are recommended.

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