Phytotaxa 152 (1): 1–17 (2013)
www.mapress.com/phytotaxa/

Article

ISSN 1179-3155 (print edition)
PHYTOTAXA
ISSN 1179-3163 (online edition)

http://dx.doi.org/10.11646/phytotaxa.152.1.1

Marine algae of the Sulu Sea Islands, Philippines II: annotated list of the brown seaweeds (Phaeophyceae) from the Cuyo Islands

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Abstract

The western section of the Philippine archipelago comprising the frontier island of Palawan and numerous islands within the vast Sulu Sea basin is least known in terms of its marine biota. The Smithsonian Institution Philippines Expedition (SIPHILEXP) collected thousands of marine samples to document the rich marine biodiversity there. Collections of marine benthic algae were made from the small islets of the Cuyo Islands located in the northern section of the Sulu Sea. This paper documents 17 species and one form of brown algae (Phaeophyceae) grouped into nine genera and five families. All except three taxa are new records for the locality. The classification and nomenclature of each species follow currently accepted systems. Extensive remarks on the peculiarities of each species are provided. Compared to the marine flora of other regions of the Indo-Pacific, the brown algal flora of the Cuyo Islands is potentially as diverse, but owing to some species that are commonly found elsewhere and were not accounted for in this survey, the rich diversity of the marine flora here cannot be fully appreciated. The available information represents a valuable contribution to the knowledge of marine brown algal diversity in this poorly known region of the Philippines.

Introduction

The vast Sulu Sea in western central Philippines represents a remote region that is little known biologically compared to other more accessible places in the country. The rich diversity of benthic marine algae occurring in the different small islands of the Sulu Sea has been studied to a limited extent during the last century. Liao & Young (2002) traced the historical development of marine phycological studies of the region that dated back to the latter part of the 19th century. Results of more recent phycological studies in the islands of the Sulu Sea have been presented beginning with those obtained from the Tubbataha Reefs (Liao & Young 2002). The present paper continues the series of reports on the marine benthic algal flora of some islands within the Sulu Sea, and focuses on the brown seaweed flora of the Cuyo Islands.

The Cuyo Islands is a group of several small islets located on the northern portion of the Sulu Sea. The islets form a chain about 80 km long from north to south, and about 60 km wide from east to west. They lie off the western coast of Panay Island and separated from it by the Cuyo East Pass. On its western edge, the Cuyo Islands faces the northeastern tip of Palawan Island and is separated from it by the Cuyo West Pass. The islands form part of the political province of Palawan and are situated approximately 275 km NE of the provincial capital, Puerto Princesa. The largest island is Cuyo, the site of one of the only two municipal centers in the island group.

Records show that Gregorio Tiongson Velasquez, the late emeritus professor of botany at the University of the Philippines, was the first to collect algal specimens from Cuyo on June 6-8, 1951. His collections were published by himself (Velasquez 1955, 1962) and by Umezaki (1958). He visited the area once more on May 12, 1964 collecting some marine species aside from freshwater cyanobacteria of which he was recognized as

Accepted by Saúl Blanco Lanza: 12 Nov. 2013; published: 11 Dec. 2013

practicing taxonomists in the Philippines has dwindled to critical levels to the detriment of biodiversity research and conservation. An equitable system of collaborative research based on mutual trust and resource-sharing must therefore be pursued more vigorously as proposed earlier (Liao 2009).

Acknowledgments

The authors express their sincere appreciation to the Smithsonian Oceanographic Sorting Center (SOSC - Dr. Leslie K. Knapp, Director) for access to the marine algal collections of the 1978 Smithsonian Institution Philippine Expedition (SIPHILEXP). The curators at BISH and the G.T. Velasquez phycological herbarium of the Marine Science Institute, University of the Philippines, Diliman are acknowledged for allowing access to additional materials used in this study. The first author acknowledges Dr. Ernani G. Meñez of SOSC for sharing many taxonomic insights and opinions, references and initial supervision for this project, the Smithsonian Institution Office of Fellowships and Grants for supporting his research at the SOSC as well as the inputs of Dr. Gavino C. Trono, Jr. in the preparation of the research results prior to submission to the Marine Science Institute of the University of the Philippines. The insightful comments and practical suggestions of two anonymous reviewers have improved the presentation of facts and overall quality of the revised manuscript for which the authors are very thankful. Dr. Saúl Blanco Lanza of the Universidad de León is acknowledged for his critical editing and helpful suggestions during the later stages of manuscript preparation.

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