

# First Cytogenetic Study of Green Chromis, *Chromis viridis* (Perciformes, Pomacentridae) by Conventional Staining and Ag-NOR Banding Techniques

Nuntaporn Getlekha<sup>1\*</sup> and Alongklod Tanomtong<sup>2</sup>

<sup>1</sup>Department of Biology, Faculty of Science and Technology, Muban Chombueng Rajabhat University, Ratchaburi 70150, Thailand

<sup>2</sup>Toxic Substances in Livestock and Aquatic Animals Research Group, Department of Biology, Faculty of Science, Khon Kaen University, Khon Kaen 40002, Thailand

\*Corresponding author. E-mail: [taapu\\_getlekha@hotmail.com](mailto:taapu_getlekha@hotmail.com)

<https://doi.org/10.12982/CMUJNS.2020.0011>

Received: January 18, 2018

Revised: March 7, 2019

Accepted: June 17, 2019

## ABSTRACT

*This work represents the first cytogenetics analysis conducted on the green chromis, Chromis viridis (Cuvier, 1830) from Thailand. Mitotic chromosomes were prepared from the anterior kidney. The cell suspensions were harvested by in vivo colchicine treatment. The slides were prepared by conventional air-drying method. Chromosomes were analyzed after the conventional and Ag-NOR staining techniques. The results showed that C. viridis has 2n=48 (48t), the fundamental number (NF) was 48 and no heteromorphic sex chromosomes were indentified. NORs were located on subcentomeric region of long arms of the 6<sup>th</sup> telocentric chromosome pair.*

**Keywords:** Chromosome, Karyotype, Nucleolar organizer region, Damsel fishes, Perciformes

## INTRODUCTION

The family Pomacentridae belongs to order Perciformes which includes the damselfishes and clownfishes (Nelson, 2006). Around 385 species distributed in 28 genera are classified in this family (Allen, 1991, 1997). Pomacentrid fishes are usually found in tropical seas, with only a few species being found in temperate waters. The highest abundance of species is found on coral reefs in the Indo-West-Pacific region. Especially, the greatest concentration of species is found on the area from the Philippines to Australia hosts. The remaining species are found