

ABSTRAKS

DANIA NUR ISKANDAR. 2024. **ANALISIS KELIMPAHAN CEMARAN MIKROPLASTIK (MPS) PADA *Filovaludina javanica* DAN *Pomacea canaliculata* DI PERAIRAN SITU GEDE SEBAGAI SUPLEMEN BAHAN AJAR BIOLOGI**. Skripsi Jurusan Pendidikan Biologi, Fakultas Keguruan dan Ilmu Pendidikan Universitas Siliwangi.

Penelitian ini bertujuan untuk menganalisis kelimpahan mikroplastik (MPs) pada gastropoda jenis Tutut Jawa (*Filovaludina javanica*) dan Keong Mas (*Pomacea canaliculata*) di Perairan Situ Gede, Kota Tasikmalaya. Penelitian menggunakan metode kualitatif deskriptif, pengambilan sampel dilakukan dengan Purposive sampling di 4 stasiun yaitu zona outlet Situ, zona pariwisata, zona Inlet situ, dan zona bebas permukiman. Pengambilan sampel gastropoda dilakukan secara hand collecting (Ariyunita, et al., 2022). Sample mikroplastik dalam gastropoda kering diidentifikasi melalui prosedur laboratorium yaitu Desktruksi, filtrasi, dan analisis visual mikroskopis menggunakan mikroskop binokuler Olympus CX22 (Nanda et al., 2023). Total temuan mikroplastik yang ditemukan dalam tubuh *Filovaludina javanica* dan *Pomacea canaliculata* di Perairan Situ Gede sebanyak 422 partikel dengan total kelimpahan sebesar 17,58 partikel/individu. Jenis MPs yang ditemukan yaitu fragmen, film, fiber, dan granula. Jumlah MPs jenis Fragmen 149 partikel, Film 69 partikel, Fiber 119, granula 88 partikel. Temuan warna mikroplastik bervariasi yaitu hitam, merah, hijau, kuning, biru, ungu dan bening. Kelimpahan mikroplastik pada sampel Tutut jawa (*Filovaludina javanica*) sebesar $18,33 \pm 7,67$ partikel/individu, dan kelimpahan mikroplastik dalam sampel Keong Mas (*Pomacea canaliculata*) $29,67 \pm 17,00$ partikel/individu. Kelimpahan tertinggi berada di stasiun 3 sebesar 24 partikel/individu dan kelimpahan MPs terendah berada di stasiun 4 sebesar 14,33 partikel/individu. E-Booklet menjadi luaran penelitian untuk produk pembelajaran sebagai pendamping bahan ajar biologi yang diharapkan mampu memberikan pengalaman belajar nyata pada siswa karena bersifat kontekstual dan aplikatif.

Kata Kunci : Kelimpahan; mikroplastik; *Filovaludina javanica*; *Pomacea canaliculata*

ABSTRACT

DANIA NUR ISKANDAR. 2024. ANALYSIS OF THE ABUDANCE OF MICROPLASTICS (MPS) CONTAMINATION ON *Filovaludina javanica* AND *Pomacea canaliculata* SITU GEDE WATERS AS SUPPLEMENT TO BIOLOGY TEACHING MATERIALS. Thesis Department of Biology Education. Faculty of Teacher Training and Education, Siliwangi University

*This study aims to analyze the abundance of microplastics (MPs) in gastropods of Tutut Jawa (*Filovaludina javanica*) and Keong Mas (*Pomacea canaliculata*) in Situ Gede Waters, Tasikmalaya City. The study used descriptive qualitative method, sampling was done by purposive sampling at 4 stations namely Situ outlet zone, tourism zone, Situ inlet zone, and settlement sterile zone. Gastropod sampling was done by hand collecting (Ariyunita, et al., 2022). Microplastic samples in dried gastropods were identified through laboratory procedures namely Destruction, filtration, and visual microscopic analysis using an Olympus CX22 binocular microscope (Nanda et al., 2023). The total microplastic findings found in the bodies of *Filovaludina javanica* and *Pomacea canaliculata* in Situ Gede Waters were 422 particles with a total abundance of 17.58 particles/individual. The types of MPs found were fragments, films, fibers, and granules. The number of MPs of the type Fragments 149 particles, Film 69 particles, Fiber 119, granules 88 particles. Microplastic color findings vary, namely black, red, green, yellow, blue, purple and clear. The abundance of microplastics in Tutut jawa (*Filopaludina javanica*) samples was 18.33 ± 7.67 particles/individual, and the abundance of microplastics in Keong Mas (*Pomacea canaliculata*) samples was 29.67 ± 17.00 particles/individual. The highest abundance was in station 3 at 24 particles/individual and the lowest MPs abundance was in station 4 at 14.33 particles/individual. The E-Booklet is a research output for learning products as a companion to biology teaching materials which are expected to provide real learning experiences for students because they are contextual and applicable.*

*Keywords : Abudance; microplastics; *Filovaludina javanica*; *Pomacea canaliculata**