ABSTRACT

This study aims to identify the species of grouper fish (Family Serranidae) landed at the Kwandang Fish Landing Base (PPI), North Gorontalo Regency, and analyze their frequency of occurrence to determine the dominance and diversity of species caught. Data collection was conducted from September to November 2025 through direct observation of fishermen's fish landing activities. Each specimen was identified based on morphological characteristics including body shape, color, color pattern, fins, and head profile. The research results showed that ten grouper species were identified: Variola albimarginata, Plectropomus leopardus, Epinephelus faveatus, E. coioides, E. fuscoguttatus, Cromileptes altivelis, E. fasciatus, Variola louti, E. bleekeri, and E. maculatus. The highest occurrence frequencies were recorded for Variola louti (20%) and E. fasciatus (18.95%), while Cromileptes altivelis had the lowest frequency (3.16%). Differences in frequency are influenced by habitat variation, species behavior, and fishing pressure. These findings emphasize the importance of species-based fisheries management and coral reef habitat conservation to maintain the sustainability of grouper stocks in Kwandang Bay.

Keywords: *Biodiversity; Grouper; Conservation; PPI Kwandang*