

ABSTRACT

Indonesia is an agricultural country where rice is the main crop. One of the challenges in rice cultivation is the presence of weeds. This study aims to identify weed species and analyze weed dominance and diversity in irrigated and tidal rice fields in Serdang Bedagai Regency. The research was conducted from March to April 2025 using a descriptive method, with purposive sampling and 1 m² quadrants across 30 plots. Results showed 11 families, 20 species, and 453 individual weeds. Dominant weeds in irrigated fields were *Monochoria vaginalis*, *Paspalum distichum*, and *Ludwigia octovalvis*, while in tidal fields they were *Ludwigia octovalvis*, *Paspalum distichum*, and *Echinochloa crus-galli*. Calculation of the diversity index were moderate 1.95 in irrigated fields; 1.79 in tidal fields, and The results of the Evenness Index were high 0.72 and 0.74, respectively, indicating relatively even weed distribution in both field types.

Keyword: Dominance index, Irrigated land, Rice field, Tidal land, Weeds