# INTISARI

Portulaca telah banyak dimanfaatkan sebagai tanaman hias, tanaman sayur dan juga tanaman obat. Portulaca tersebar hampir di seluruh dunia sehingga memiliki keragaman fenotipe yang tinggi. Penelitian ini bertujuan untuk mengetahui keragaman dan kekerabatan Portulaca Keragaman diidentifikasi dengan melakukan karakterisasi morfologi terhadap berbagai karakter batang, daun, serta bunga Portulaca, kemudian dilakukan analisis klaster dan analisis komponen utama (PCA). Selanjutnya hubungan masing-masing sifat melalui analisis korelasi, analisis regresi *stepwise*. Penelitian dilaksanakan di Desa Margorejo, Kecamatan Tempel, Kabupaten Sleman pada bulan Mei hingga Agustus 2023. Penelitian disusun menggunakan rancangan acak lengkap (RAL) dengan dua puluh lima aksesi Portulaca sebagai perlakuan. Hasil penelitian menghasilkan deskripsi karakter masing-masing aksesi, hubungan kekerabatan, serta identifikasi hubungan antar karakter yang terjadi. Hasil analisis kekerabatan menunjukkan hasil bahwa dua puluh lima aksesi Portulaca terbagi menjadi 4 klaster utama pada koefisien kemiripan 0,50 dan pengelompokkan ini dipengaruhi oleh karakter susunan bunga, tipe pertumbuhan batang dan bentuk daun. Analisis hubungan karakter juga menunjukkan bahwa terdapat beberapa karakter yang saling memiliki keterkaitan.

Kata kunci: Portulaca, morfologi, keragaman, kekerabatan, analisis klaster

# *ABSTRACT*

*Portulaca has been widely utilized as an ornamental plant, vegetable, and medicinal plant. It is distributed nearly worldwide, resulting in high phenotypic diversity. This study aims to assess the diversity and relationships among Portulaca. Diversity was identified through morphological characterization of various stem, leaf, and flower traits, followed by cluster analysis and principal component analysis (PCA). Subsequently, the relationships among traits were analyzed through correlation analysis and stepwise regression analysis. The research was conducted in Margorejo Village, Tempel District, Sleman Regency from May to August 2023. Environmental design that used for this study is completely randomized design (CRD) with twenty-five accessions of Portulaca as treatment. The results provided a description of the traits of each accession, genetic relationship, and identification of inter-character relationships. Cluster analysis revealed that the twenty-five Portulaca accessions were divided into four main clusters at a similarity coefficient of 0.50, this clustering influenced by floral arrangement traits, stem growth type, and leaf shape. The analysis of character relationships also indicated that several traits were interrelated.*

*Keywords: Portulaca, morphology, diversity, genetic relationships, cluster analysis*