

ABSTRAK

Suci Divia Rachim. 24020119120039. **Keanekaragaman Sumber Daya Genetik Tumbuhan Umbi-Umbian dan Kandungan Karbohidratnya di Kecamatan Mijen.** Laboratorium Ekologi dan Biosistematik, Departemen Biologi, Fakultas Sains dan Matematika, Universitas Diponegoro.

Sumber daya genetik tumbuhan umbi-umbian penting untuk ketahanan pangan nasional karena bagian umbinya yang kaya akan karbohidrat. Minat masyarakat yang rendah dalam menanam umbi-umbian menyebabkan produksi menurun dan kelestariannya terancam. Penelitian ini bertujuan untuk mengkaji keanekaragaman sumber daya genetik tumbuhan umbi-umbian di Kecamatan Mijen berdasarkan karakter morfo-agronomi dan menganalisis kandungan karbohidrat setiap varian. Metode penelitian dilakukan dengan metode jelajah untuk mengetahui keanekaragaman sumber daya genetik tumbuhan umbi-umbian di Kecamatan Mijen, serta metode Luff Schoorl untuk mengetahui kandungan karbohidrat seluruh varian umbi yang ditemukan di lokasi. Hasil penelitian menunjukkan keanekaragaman pada sumber daya genetik tumbuhan umbi-umbian di Kecamatan Mijen terdiri dari 9 jenis yang tergolong dalam 5 famili. Famili yang ditemukan adalah Araceae, Cannaceae, Convolvulaceae, Dioscoreaceae, dan Euphorbiaceae. Jenis-jenis yang ditemukan yaitu *Alocasia macrorrhiza* (serawak), *Amorphophallus paeoniifolius* (suweg), *Colocasia esculenta* (talas) var. *antiquorum* dan varian pleci, serta *Xanthosoma sagittifolium* (talas kimpul), *Canna edulis* (ganyong), *Ipomoea batatas* (ubi jalar) varian ungu dan varian cileumbu, *Dioscorea alata* (uwi) varian putih dan varian merah, *Dioscorea esculenta* (gembili), serta *Manihot esculenta* syn. *utilisima* (ubi kayu) varian kerpeg, merteg, gatot kaca, padang, dan pulut. Jenis-jenis tersebut memiliki kandungan karbohidrat yang berbeda-beda. Kandungan karbohidrat tertinggi terdapat pada *Ipomoea batatas* varian cileumbu sebanyak 50,49%.

Kata kunci: keanekaragaman genetik, karbohidrat, umbi-umbian, ketahanan pangan, Kecamatan Mijen

ABSTRACT

Suci Divia Rachim. 24020119120039. *Genetic Resources Diversity of Tuberous Plants and their Carbohydrate Content in Mijen District*. Laboratory of Ecology and Biosystematics, Department of Biology, Faculty of Science and Mathematics, Diponegoro University.

Genetic resources of tuberous plants are important for national food security because the tuber part is rich in carbohydrates. The lack of public interest in planting tubers has caused production to decline and its sustainability is threatened. This study aims to analyze the diversity of genetic resources of root crops in Mijen District based on morpho-agronomic characters and analyze the carbohydrate content of each variant of root crops in Mijen District. The research method was carried out with the cruising method to determine the diversity of genetic resources of tuberous plants in Mijen District, as well as the Luff School method to determine the carbohydrate content of all tuber variants found at the location. The results showed that the diversity of tuberous plant genetic resources in Mijen Sub-district consisted of 9 species belonging to 5 families. Families found in Mijen District are Araceaceae, Cannaceae, Convolvulaceae, Dioscoreaceae, and Euphorbiaceae. The species found are *Alocasia macrorrhiza* (serawak), *Amorphophallus paeoniifolius* (suweg), *Colocasia esculenta* (talas) var. *antiquorum* and variant pleci, *Xanthosoma sagittifolium* (talas kimpul), *Canna edulis* (ganyong), *Ipomoea batatas* (ubi jalar) variant ungu and cileumbu, *Dioscorea alata* (uwi) variant putih dan variant merah, *Dioscorea esculenta* (gembili), also *Manihot esculenta* syn. *utilisima* variant kerpeg, merteg, gatot kaca, padang, dan pulut. The highest carbohydrate content was found in *Ipomoea batatas* var. cileumbu as much as 50.49%.

Keywords: diversity, carbohydrates, tubers, food, Mijen District