



INTISARI

Ubi kayu, tanaman tahunan berkayu dari famili Euphorbiceae, berpotensi sebagai alternatif beras sebagai makanan pokok di Indonesia. Peningkatan kebutuhan ubi kayu berumbi kuning dan rasa enak menyebabkan perakitan varietas unggul baru perlu dilakukan. Seleksi baris tunggal merupakan seleksi kedua untuk pelepasan varietas ubi kayu. Data diperoleh dari 97 klon ubi kayu dan 2 klon komersial yaitu Adira 1 dan Malang 1 yang merupakan koleksi Balai Penelitian Tanaman Aneka Kacang dan Umbi. Klon ditanam dalam 1 baris menggunakan rancangan *lattice* sederhana di Instalasi Penelitian dan Pengkajian Teknologi Pertanian Jember, Jember. Penelitian ini bertujuan mengevaluasi klon ubi kayu berdaging umbi kuning dan memperoleh klon ubi kayu berdaging umbi kuning, berdaya hasil tinggi, dan sesuai untuk bahan baku pangan. Analisis korelasi dan kluster dilakukan pada data fenotipe yaitu morfologi daun, batang, umbi, dan hasil umbi. Selain itu, sifat kualitatif dilaporkan dalam bentuk deskripsi. Hasil penelitian menunjukkan keragaman berbagai karakter daun, batang, dan umbi. Hasil umbi berkorelasi nyata dengan indeks panen, jumlah umbi besar, dan diameter umbi besar. Analisis kluster menghasilkan dendrogram terbagi menjadi dua kelompok utama. Diperoleh 53 klon ubi kayu berumbi kuning yang mengindikasikan kandungan beta karoten yang tinggi. Hasil umbi berkisar 0,02 kg hingga 8,90 kg dengan rata-rata 2,25 kg. Terdapat 48 klon memiliki hasil umbi di atas rata-rata klon pembandingan. Umbi dengan potensi hasil tinggi, berdaging umbi kuning, dan rasa tidak pahit diperoleh pada 6 klon yaitu 4_14, 7_4, 5_3B, 9_2, 5_3A, dan 12_7.

Kata kunci : ubi kayu, seleksi baris tunggal, umbi kuning.



ABSTRACT

Cassava, a woody perennial plant from the Euphorbiaceae family, has the potential as an alternative to rice as a staple food in Indonesia. The increasing demand for cassava with yellow roots and good taste causes the developing of new high-yielding varieties to be carried out. Single row selection is the second selection for the release of cassava varieties. Data were obtained from 97 cassava clones and 2 commercial clones, namely Adira 1 and Malang 1 which were collected from the Indonesian Legumes and Tuber Crops Research Institute. The clones were planted in single row using a simple lattice design at Jambegede Research Station, Malang. The aimed of this study were to evaluate cassava clones with yellow roots and to obtain cassava clones with yellow roots, high yielding, and suitable for food. Correlation and cluster analysis were carried out on phenotype data, namely leaf, stem, tuber, and tuber morphology. In addition, qualitative traits are reported in the description forms. The results showed the diversity of various characters of leaves, stems, and roots. The root yield was significantly correlated with the harvest index, the number of large roots, and the diameter of the large roots. Cluster analysis resulted in a dendrogram divided into two main groups. There were 53 clones of yellow root cassava which indicated high beta carotene content. The root yield ranged from 0.02 kg to 8.90 kg with an average of 2.25 kg. There were 48 clones with root yields above the average of commercial clones. Six clones were obtained with high yield potential roots, yellow fleshy roots, and non-bitter taste, namely 4_14, 7_4, 5_3B, 9_2, 5_3A, and 12_7.

Keywords: cassava, single row trials, yellow root.