

INTISARI

Penelitian ini bertujuan untuk mengevaluasi keragaman morfologi buah kepel dan menganalisis hubungan kekerabatan kepel yang tersebar di Kotamadya Yogyakarta berdasarkan morfologi buah kepel. penelitian dilakukan di Kotamadya Yogyakarta dari maret hingga juni 2019, pengukuran sampel dilakukan di laboratorium kultur in vitro dan laboratorium pasca panen fakultas pertanian UMY. Metode penelitian menggunakan teknik *purposive sampling* dengan menetapkan ciri khusus yaitu tanaman kepel yang sedang berbuah, satu individu tanaman kepel diambil 10 buah kepel yang sudah matang fisiologis. Data hasil pengamatan morfologi buah disajikan dalam bentuk skoring kemudian menganalisis matriks kemiripan menggunakan prosedur SIMQUAL (*Similarity for Qualitif Data*). Pengelompokan data matriks dan pembuatan dendogram menggunakan metode *Unweigthed Pair Group Method Arithmetic Average* (UPGMA) pada program *Numerical Taxonomic and Multivariate System* (NTSYS) versi 2.02i. Hasil penelitian memperlihatkan adanya keragaman berdasarkan sifat kualitatif dan kuantitatif pada morfologi buah kepel. Keragaman tersebut seperti bentuk buah, panjang buah, lebar buah, tebal buah, diameter buah, berat buah, tingkat kemasakan buah, tebal daging buah, warna daging buah, tekstur daging buah, jumlah biji, lebar biji, panjang biji, tebal biji, diameter biji. Analisis kluster yang dilakukan pada 12 individu kepel yang berbuah di Kotamadya Yogyakarta diperoleh 5 kluster dengan nilai koefisien kemiripan 0,44 yaitu kluster I : 2 akses, kluster II : 3 akses, kluster III : 5 akses, kluster IV : 1 akses dan kluster V : 1 akses.

Kata kunci : Kepel, Analisis kekerabatan, Kotamadya Yogyakarta.

ABSTRACT

This study aims to evaluate the morphological diversity of Kepel and analyse the genetical relationship towards Kepel distribution in Yogyakarta municipality based on fruit morphological. The research conducted in Yogyakarta municipality started in March-June 2019, and sample measurements carried out at in vitro culture laboratory and post-harvest laboratory, Agriculture Faculty, UMY. This study conducted using a purposive sampling method by specifying a distinctive characteristic of Kepel which has ripened, and one individual Kepel plant took ten physiologically of ripe Kepel. Data morphological observations presented by score form and then analysed the matrix similarity using SIMQUAL (Similarity of Qualitative Data) procedure. Matrix data grouping and dendrogram creation using Unweighted Pair Group Method Arithmetic Average (UPGMA) method in the Numerical Taxonomic and Multivariate System (NTSYS) program version 2.02i. The results prove that the diversity of Kepel fruit based on the qualitative and quantitative characterisation of Kepel morphology. The Kepel variety consists of fruit morphology such as shape, length, width, thickness, diameter, weight, maturity, flesh thickness, flesh colour, flesh texture, number of seeds, seed width, seed length, seed thickness, and seed diameter. Cluster analysis conducted on twelve individual Kepel in Yogyakarta municipality obtained five clusters with a similarity coefficient value of 0.44, namely group I:2 accessions, II:3 accession cluster, III:5 accession cluster, IV:1 accession cluster, and V:1 accession cluster.

Keywords : Kepel, Analyse the genetical relationship, Yogyakarta municipality.