

RINGKASAN

Durian (*Durio zibethinus* L.) termasuk dalam famili Malvaceae, merupakan salah satu tumbuhan buah yang berasal dari Asia Tenggara. Durian unggulan Kecamatan Mojogedang ialah montong dan kani. Kecamatan Mojogedang merupakan salah satu penghasil durian di daerah Surakarta. Penelitian bertujuan untuk mengetahui keanekaragaman dan hubungan kemiripan durian yang terdapat di Kecamatan Mojogedang, Kabupaten Karanganyar.

Penelitian dilaksanakan menggunakan metode survei dengan teknik pengambilan sampel secara *purposive sampling*. Sampel diambil dari 4 desa di Kecamatan Mojogedang yaitu Desa Pojok, Desa Pendem, Desa Sewurejo dan Desa Mojogedang. Variabel yang diamati adalah karakter morfologi batang, daun, bunga, buah dan biji. Parameter yang diamati dalam penelitian ini meliputi umur pohon, bentuk tajuk, warna kulit batang, bentuk daun, panjang daun, lebar daun, warna daun permukaan atas, warna daun permukaan bawah, warna mahkota bunga, warna tangkai sari, warna kepala sari, bentuk buah, bentuk ujung buah, bentuk pangkal buah, berat buah, ketebalan kulit buah, jumlah segmen buah, warna arilus, ketebalan arilus, rasa arilus, bentuk biji, warna biji, bentuk duri dan ujung duri. Analisis data dilakukan secara deskriptif untuk mengetahui keanekaragaman kultivar durian dan untuk mengetahui hubungan kemiripan, data dianalisis dengan metode UPGMA (*Unweighted Pair Group Method With Arithmetic Mean*) menggunakan MEGA 11.

Hasil penelitian ini menunjukkan bahwa di Kecamatan Mojogedang ada 6 kultivar durian yaitu petruk, kani, montong, sunan, aspar dan sukun. Hubungan kemiripan terdekat adalah durian aspar dan petruk dengan nilai indeks disimilaritas 0,416. Sedangkan durian yang memiliki hubungan kemiripan terjauh adalah montong dan aspar dengan nilai indeks disimilaritas 1,130. Karakter yang membedakan antara durian aspar dan petruk yaitu umur pohon, bentuk tajuk, warna kulit batang, panjang daun, lebar daun, berat buah, warna kulit buah, ketebalan kulit buah, warna arilus, ketebalan arilus dan warna biji. Sedangkan karakter yang membedakan antara durian kani dan aspar yaitu umur pohon, bentuk tajuk, warna kulit batang, panjang daun, lebar daun, warna daun permukaan atas, warna mahkota bunga, bentuk buah, ujung buah, berat buah, warna kulit buah, ketebalan kulit buah, jumlah segmen, warna arilus, ketebalan arilus, bentuk biji dan warna biji.

Kata kunci: *durian, hubungan kemiripan, keanekaragaman, kultivar, Mojogedang*

SUMMARY

Durian (*Durio zibethinus* L.) belongs to the family Malvaceae and is one of the fruit plants native to Southeast Asia. The superior durian cultivars of Mojogedang District are montong and kani. Mojogedang District is one of the durian producing areas in the Surakarta region. This study aimed to determine the diversity and similarity relationships of durian cultivars found in Mojogedang District, Karanganyar Regency.

The research was conducted using a survey method with purposive sampling techniques. Samples were collected from four villages in Mojogedang District, namely Pojok Village, Pendem Village, Sewurejo Village, and Mojogedang Village. The observed variables included the morphological characteristics of stems, leaves, flowers, fruits, and seeds. The parameters observed in this study comprised tree age, canopy shape, bark color, leaf shape, leaf length, leaf width, upper leaf surface color, lower leaf surface color, petal color, filament color, anther color, fruit shape, fruit apex shape, fruit base shape, fruit weight, fruit rind thickness, number of fruit segments, aril color, aril thickness, aril taste, seed shape, seed color, spine shape, and spine tip shape. Data analysis was conducted descriptively to determine durian cultivar diversity, while similarity relationships were analyzed using the UPGMA (*Unweighted Pair Group Method with Arithmetic Mean*) method with MEGA 11 software.

The results showed that there were six durian cultivars in Mojogedang, namely petruk, kani, montong, sunan, aspar, and sukun. The closest similarity relationship was observed between durian aspar and durian petruk, with a dissimilarity index value of 0.416. In contrast, the most distant similarity relationship was found between durian montong and durian aspar, with a dissimilarity index value of 1.130. The distinguishing characters between durian aspar and durian petruk included tree age, canopy shape, bark color, leaf length, leaf width, fruit weight, fruit peel color, fruit peel thickness, aril color, aril thickness, and seed color. Meanwhile, the characters that differentiated durian kani and durian aspar comprised tree age, canopy shape, bark color, leaf length, leaf width, upper leaf surface color, flower petal color, fruit shape, fruit apex, fruit weight, fruit peel color, fruit peel thickness, number of segments, aril color, aril thickness, seed shape, and seed color.

Keywords: *cultivar, diversity, durian, Mojogedang, similarity*