

# Studi variasi morfologi bunga *dendrobium crumenatum* sw orchidaceae di Indonesia = Morphological variation study of *dendrobium crumenatum* sw orchidaceae flower in Indonesia

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## Abstrak

[Dendrobium crumenatum merupakan jenis anggrek yang memiliki variasi morfologi akibat adanya persebaran yang luas. Studi literatur menunjukkan bahwa penelitian terhadap variasi morfologi bunga Dendrobium crumenatum belum dilakukan, salah satunya akibat penjelasan deskripsi yang tidak sama dari tiap-tiap pulau. Oleh karena itu, penelitian yang dilakukan bertujuan untuk membuat deskripsi yang sama dan lebih lengkap, kemudian menganalisis karakter-karakter yang signifikan berbeda dan memberikan gambaran mengenai pola pengelompokan berdasarkan pola biogeografi. Penelitian yang dilakukan menggunakan 78 spesimen vegetatif dan 51 spesimen bunga. Sebanyak 33 karakter dari 37 spesimen bunga dianalisis menggunakan Principal Component Analysis (PCA). Hasil analisis menunjukkan bahwa ukuran perhiasan bunga, tepi lobus tengah, bentuk sepal dorsal dan sepal lateral, kalus, dan perbandingan panjang lobus tengah dan lobus samping labellum merupakan karakter-karakter yang signifikan berbeda. Hasil analisis juga menunjukkan tiga kelompok yang terpisah, yaitu kelompok 1 (Sumatera, Jawa, Kalimantan, dan Sulawesi) sebagai Dendrobium crumenatum, kelompok 2 (Nusa Tenggara) sebagai Dendrobium sp., dan kelompok 3 (Sulawesi Utara dan Maluku) sebagai Dendrobium papilioniferum. Hasil penelitian ini dapat menjadi bahan referensi untuk mengubah distribusi Dendrobium crumenatum, menjadikan Dendrobium papilioniferum menjadi jenis yang terpisah, dan menjadi data awal publikasi jenis baru Dendrobium dari Nusa Tenggara.

;Dendrobium crumenatum is an orchid species that have morphological variation due to the broad distribution. The literature study shows that the study of morphological variation about Dendrobium crumenatum has not been done, one of them as a result of the description which are not the same from each island. Therefore, the aims of this research are to make the same and complete description, then analyze the significantly different characters and give a description of grouping based on biogeographic patterns. The conducted research using 78 specimens vegetative and 51 specimens of flowers. A total 33 morphological characters from 37 flower spesimens were analyzed using Principal Component Analysis (PCA). The analysis shows that the size of the flower parts, the edge of the middle lobe, dorsal sepals and lateral sepals form, callus, and the length ratio between middle lobe and the side lobe labellum are significantly different characters. The analysis also shows three separate groups, namely the group 1 (Sumatra, Java, Borneo, and Celebes) as Dendrobium crumenatum, group 2 (Lesser Sunda) as Dendrobium sp., and group 3 (North Sulawesi and Moluccas) as Dendrobium papilioniferum. Results of this study can be a reference material to restrict the distribution of Dendrobium crumenatum, to make Dendrobium papilioniferum a separate species, and be an early data into new species publication about Dendrobium sp. of Lesser Sunda.

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