Pengaruh gradien ketinggian terhadap variasi morfologi rotan calamus javensis blume (Arecaceae) di Gunung Kendeng, Taman Nasional Gunung Halimun Salak, Jawa Barat = altitudinal gradient effect on morphological characters of rattan calamus javensis blume (Arecaceae) in Mountain Kendeng, Mountain Halimun Salak National Park, West Java

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Abstrak

Penelitian mengenai pengaruh gradien ketinggian terhadap variasi morfologi rotan Calamus javensis Blume (Arecaceae) telah dilakukan di Gunung Kendeng, Taman Nasional Gunung Halimun Salak (TNGHS), Jawa Barat. Penelitian tersebut bertujuan mengetahui variasi morfologi, sebaran variasi morfologi populasi C. javensis terhadap ketinggian, serta mengidentifikasi karakter morfologi tertentu yang dipengaruhi ketinggian. Sebanyak 16 karakter morfologi C. javensis yang meliputi organ batang dan daun dianalisis menggunakan Cluster Analysis (CA) dan Principal Component Analysis (PCA). Penelitian dilakukan pada kisaran ketinggian 1000--1300 mdpl, namun populasi C. javensis di Gunung Kendeng sudah tidak dijumpai pada ketinggian 1200--1300 mdpl. Hasil CA menunjukkan adanya 3 kelompok C. javensis berdasarkan variasi morfologi di Gunung Kendeng, TNGHS. Kelompok 3 yang memiliki karakter jumlah duri jarang serta leaflet basal spreading merupakan C. javensis var. inermis. Hasil PCA menunjukkan bahwa karakter yang berperan dalam variasi morfologi populasi C. javensis meliputi leaflet basal, jumlah duri upih, panjang petiolus, bentuk leaflet basal, diameter batang, dan panjang duri upih. Sebaran variasi morfologi berdasarkan ketinggian masih tumpang tindih. Hasil analisis regresi linier sederhana menunjukkan bahwa gradien ketinggian tidak memberikan pengaruh yang signifikan pada ke-16 karakter morfologi populasi C. javensis pada ketinggian 1000--1200 mdpl. Dapat disimpulkan bahwa karakter morfologi dari C. javensis pada ketinggian 1000--1200 mdpl di gunung Kendeng belum menunjukkan clinal variation.

.....Altitudinal gradient effect on morphological characters of Calamus javensis Blume (Arecaceae) has been studied in Mountain Kendeng, Mountain Halimun Salak National Park (MHSNP), West Java. The goals of this study were to analyze morphological variation and variation distribution of C. javensis population, also to identify certain characters that affected by altitudinal gradient. 16 morphological characters from stem and leaf were analyzed using Cluster Analysis (CA) and Principal Component Analysis (PCA). The range of altitude that used in this study was 1000--1300 mdpl, but C. javensis population was absent in 1200--1300 mdpl. CA classified C. javensis specimens into 3 groups. The third group, characterized by few spines on its leaf sheath and spreading basal leaflet, was identified as C. javensis var. inermis. Characters that were analyzed using PCA showed that basal leaflet, spine abundance of leaf sheath, petiole length, basal leaflet shape, stem diameter, and leaf sheath spine length were important characters in morphological variation of C. javensis. Morphological variation of C. javensis showed overlapped distribution. Simple linear regression analysis showed there was no character of C. javensis that significantly affected by altitudinal gradient. In conclusion, morphological characters of C. javensis population in Mountain Kendeng, MHSNP, from 1000 to 1200 m.a.s.l. had not showed the clinal variation yet.