Studi populasi dan strategi konservasi saurauia spp. di Gunung Slamet, Jawa Tengah = Population study and conservation strategy of saurauia spp. in Mount Slamet, Central Java

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Abstrak

Saurauia merupakan salah satu marga tumbuhan dari suku Actinidiaceae. Marga tumbuhan ini tersebar alami di beberapa dataran tinggi daerah tropis dan subtropis, termasuk kawasan Gunung Slamet di Indonesia. Beberapa spesies Saurauia berpotensi sebagai obat tradisional untuk mengobati diabetes, kanker dan kolesterol. Saat ini populasi Saurauia di Indonesia mulai berkurang. Beberapa spesies Saurauia masuk dalam daftar merah International Union for Conservation of Nature (IUCN). Penelitian ini bertujuan untuk mengetahui kondisi populasi, preferensi habitat dan menyusun strategi konservasi Saurauia spp. di kawasan Gunung Slamet. Penelitian dilakukan di 4 lokasi pada lereng yang berbeda di Gunung Slamet pada elevasi 900--2400 mdpl. Pengambilan data populasi dilakukan dengan purposive sampling mengikuti jalur pendakian yang sudah ada. Plot ukur seluas 20x20 m2 dibuat pada lokasi ditemukannya Saurauia spp. Data yang diambil meliputi spesies, jumlah, tinggi dan diameter. Beberapa parameter lingkungan dicatat seperti elevasi, kemiringan lereng, arah lereng, tutupan kanopi, pH, kelembapan relatif tanah, suhu dan kelembapan relatif udara. Analisis faktor habitat dilakukan dengan metode Principle Component Analysis (PCA). Pemodelan distribusi spasial dilakukan menggunakan maxent v3.3. Hasil penelitian ditemukan 636 individu Saurauia dalam 103 plot ukur. Jumlah tersebut terdiri dari 4 spesies Saurauia, yaitu S. nudiflora DC. (90 individu), S. pendula Blume (382), S. microphylla de Vriese (145) dan S. bracteosa DC. (19). Struktur populasi Saurauia yang ditemukan didominasi oleh fase anakan sekitar 63,99 % dan fase dewasa 36,01 %. Hasil PCA menunjukkan bahwa faktor elevasi sangat berpengaruh terhadap sebaran Saurauia di Gunung. Faktor-faktor pengganggu pertumbuhan populasi Saurauia spp antara lain faktor alam (patah, epifit dan liana) dan faktor antropogenik (penebangan dan perubahan fungsi lahan selain hutan). Beberapa strategi konservasi perlu dilakukan antara lain mempertahankan fungsi hutan lokasi sebaran Saurauia spp., konservasi ex-situ S. nudiflora dan S. bracteosa, dan reintroduksi S. nudiflora dan S. bracteosa di kawasan Gunung Slamet.

.....Saurauia belongs to Actinidiaceae family. These genus is naturally distributed in tropical and subtropical highlands, including Mount Slamet in Indonesia. Some species of Saurauia have potential use as traditional medicines for diabetes, cancer and cholesterol. Currently, the population of Saurauia in Indonesia has begun to decrease. Some species of Saurauia are included in the IUCN Red List. This research aims to determine the population conditions and habitat preference as well as to develop conservation strategy of Saurauia spp. in Mount Slamet. This research was conducted at 4 locations on different slopes of Mount Slamet with the elevation range of 900--2400 m above sea level. Population data collection was carried out by following an existing climbing path using the purposive sampling method. Measuring plots of 20x20 m2 were made at the locations where Saurauia spp were located. The data taken included the species types, number of individual, height and diameter of Saurauia. Several environmental parameters were also recorded in each plot, including elevation, slope, aspects, canopy cover, soil pH, soil Rh, temperature and humidity. Analysis of habitat factor was done by Principle Component Analysis (PCA) using SPSS software. Spatial distribution

model was performed using maxent v 3.3. The results of study showed that there were 636 Saurauia individuals in a total of 103 measuring plots. These individuals consisted of 4 species namely S. nudiflora DC. (90 individuals), S. pendula Blume (382), S. microphylla de Vriese (145) and S. bracteosa DC. (19). The Saurauia population structure was dominated by juvenile phase with approximately 63.99 %, whereas the mature phase was onlys 36.01 % from the total population. PCA results showed that the elevation factor affects the distribution of Saurauia in Mount Slamet. The threatening factors of Saurauia spp. population include natural factors (stem broken, epiphytes, liana) and anthropogenic factors (logging and land use conversion). Several conservation strategies need to be done i.e. preserve the forest function on Saurauia spp. natural distribution area on Mount Slamet, ex-situ conservation on S. nudiflora and S. bracteosa, and reintroduction program on S. nudiflora and S. bracteosa in Mount Slamet area.