

KERAPATAN DAN STRUKTUR POPULASI
EDELWEIS JAWA (*Anaphalis javanica* (DC.) Sch.Bip.)
DI SEKITAR JALUR PENDAKIAN SELO, RESORT SEMUNCAR,
TAMAN NASIONAL GUNUNG MERBABU

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INTISARI

Edelweis Jawa (*Anaphalis javanica* (DC.) Sch.Bip.) adalah salah satu spesies yang mendominasi zona ekosistem sub-alpin di kawasan Taman Nasional Gunung Merbabu. Spesies ini merupakan jenis pioner tanah vulkanik yang terkenal karena keindahan dan keawetan bunganya. Hingga kini, Edelweis Jawa masih mendapat sedikit perhatian dari para peneliti. Penelitian ini bertujuan untuk mengungkap kepadatan dan struktur populasi dari Edelweis Jawa.

Penentuan sampel dilakukan menggunakan 29 petak ukur 5m x 5m. Petak ukur diletakkan mulai elevasi 2400-3142 meter di atas permukaan laut. Dalam setiap petak ukur dilakukan pengukuran jumlah individu, tinggi, diameter, suhu udara, kelembaban udara, intensitas cahaya, dan deskripsi tapak. Kepadatan dideskripsikan menggunakan jumlah individu per petak ukur, varians, koefisien variasi, dan *confidence interval*. Struktur populasi diklasifikasikan menggunakan analisis klaster untuk melihat kemiripan antar petak ukur. Pola spasial dideteksi menggunakan indeks dispersi Poisson.

Kepadatan Edelweis Jawa bervariasi dengan nilai kepadatan rata-rata 15.572 individu per hektar. Struktur populasi Edelweis Jawa sangat bervariasi, didominasi oleh individu yang termasuk ke dalam kelas tinggi 3-6 dan kelas diameter 1-3. Pola spasial populasi Edelweis Jawa memperlihatkan pola mengelompok.

Kata kunci: Edelweis Jawa, *Anaphalis javanica*, Kepadatan, Struktur Populasi, Pola Spasial

DENSITY AND STRUCTURE OF JAVANESE EDELWEIS
(*Anaphalis javanica* (DC.) Sch.Bip.) POPULATION
AROUND SELO MOUNTAINEERING TRAIL, SEMUNCAR RESORT,
MOUNT MERBABU NATIONAL PARK

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ABSTRACT

Javanese Edelweis (*Anaphalis javanica* (DC.) Sch.Bip.) is a dominant species in the sub-alpin zone of Mount Merbabu National Park area. The species is pioneer of volcanic substrate and it becomes famous because of its beauty and durability. Until now, it has been receiving little attention from Javanese Edelweis researchers. The research was aimed at determining the density and population structure of Javanese Edelweis.

The sampling method used 29 quadrats, each with a size 5m x 5m. The quadrats were located at 2400-3142 meters above sea level. Within each quadrat, the measurement of individual number, height, diameter, temperature, moisture, light intensity, and site description were performed. The density of Javanese Edelweis was described by the mean number of individuals per sampling, variance, coefficient variance, and confidence interval. The population structure of Javanese Edelweis was classified using cluster analysis to place similar samples into clusters. The spatial pattern of Javanese Edelweis was detected using Poisson's indices of dispersion.

The density of Javanese Edelweis was various and the mean number of density was 15.572 individuals per hectare. The population structure of Javanese Edelweis was various and dominated by height class 3 to 6 and diameter class 1 to 3. The spatial pattern of Javanese Edelweis was clumped.

Keywords: Javanese Edelweis, *Anaphalis javanica*, Density, Population Structure, Spatial Pattern