

**DISTRIBUSI PAKAN ALAMI DAN *SALT LICK* GAJAH SUMATRA (*Elephas maximus sumatranus*) DI LAHAN KONSESI PT TUSAM HUTANI LESTARI, KORIDOR PEUSANGAN, PROVINSI ACEH**

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**INTISARI**

*Elephas maximus sumatranus* merupakan satwa endemik Sumatra yang kelangsungan hidupnya dipengaruhi oleh kondisi habitat khususnya ketersediaan pakan dan sumber mineral tambahan *salt lick*. Penelitian ini dilakukan di lahan konsesi PT Tusam Hutani Lestari, Koridor Peusangan, Provinsi Aceh dengan tujuan untuk mengetahui distribusi pakan alami serta lokasi *salt lick* yang dimanfaatkan gajah sumatra.

Pengumpulan data pakan dilakukan dengan metode *systematic sampling* pada grid besar 5x5 km<sup>2</sup> dan grid kecil 1x1 km<sup>2</sup>. Pada tiap grid kecil dibuat plot 5x5 m<sup>2</sup> untuk pancang dan palma serta 1x1 m<sup>2</sup> untuk semai, rumput, dan tumbuhan bawah, disertai pengambilan sampel kotoran pada setiap transek. Vegetasi diidentifikasi dan diuji melalui *cuticle microhistological analysis*, sementara kotoran dilakukan uji *faecal analysis* guna memastikan jenis pakan alami. Data tanah diambil bersamaan dengan sampel pakan untuk dianalisis kandungan mineralnya kalsium (Ca), magnesium (Mg), dan kalium (K). Hasil analisis kemudian divisualisasikan menggunakan *software* Arcgis 10.8 dengan metode *kernel density*.

Distribusi spasial menunjukkan konsentrasi pakan alami dan *salt lick* yang bervariasi, mulai dari tutupan hutan primer, sekunder, semak, hingga perkebunan. Teridentifikasi 50 spesies pakan dari *faecal analysis* dan 9 spesies terkonfirmasi dari literatur. Hasil kondisi ketersediaan *salt lick* menunjukkan kandungan Ca rentang 0.0024–0.4512 cmol/kg, Mg rentang 0,0032–0,3104 cmol/kg, dan K Tersedia rentang 0.0001–0,6703 cmol/kg. Tanda-tanda *salt lick* terkonsentrasi pada area dengan kandungan kalsium (Ca) relatif tinggi. Hasil penelitian ini memberikan dasar ilmiah bagi pengelolaan habitat, khususnya dalam penentuan zona prioritas konservasi, pengkayaan pakan alami, serta pembangunan terminal *salt lick* di area yang minim aktivitas manusia.

**Kata Kunci:** *Elephas maximus sumatranus*, pakan, *salt lick*, *cuticle microhistological analysis*, dan *kernel density*

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**DISTRIBUTION OF NATURAL FORAGE AND SALT LICKS OF SUMATRAN ELEPHANT (*Elephas maximus sumatranus*) IN THE CONCESSION AREA OF PT TUSAM HUTANI LESTARI, PEUSANGAN CORRIDOR, ACEH**

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**ABSTRACT**

*Elephas maximus sumatranus* is an endemic species of Sumatra whose survival is strongly influenced by habitat conditions, particularly the availability of natural forage and additional mineral sources such as salt licks. This study was conducted in the concession area of PT Tusam Hutani Lestari, Peusangan Corridor, Aceh Province, with the objective of identifying the distribution of natural forage and the locations of salt licks utilized by the Sumatran elephant.

Forage data were collected using a systematic sampling method within large grids of 5×5 km<sup>2</sup> and small grids of 1×1 km<sup>2</sup>. In each small grid, 5×5 m<sup>2</sup> plots were established for saplings and palms, and 1×1 m<sup>2</sup> plots for seedlings, grasses, and understory vegetation, accompanied by dung sampling along each transect. Vegetation was identified and examined through cuticle microhistological analysis, while dung samples were analyzed using faecal analysis to confirm the types of natural forage consumed. Soil samples were collected simultaneously with forage samples to analyze mineral content, including calcium (Ca), magnesium (Mg), and potassium (K). The results were visualized using ArcGIS 10.8 software with the kernel density method.

Spatial distribution analysis revealed varying concentrations of natural forage and salt licks across different land covers, including primary forest, secondary forest, shrubs, and plantation areas. A total of 50 forage species were identified from faecal analysis, with 9 additional species confirmed through literature. The availability of salt licks showed Ca concentrations ranging from 0.0024 to 0.4512 cmol/kg, Mg from 0.0032 to 0.3104 cmol/kg, and available K from 0.0001 to 0.6703 cmol/kg. Salt lick traces were concentrated in areas with relatively high calcium (Ca) content. The results of this study provide a scientific basis for habitat management, particularly in determining conservation priority zones, enriching natural forage, and developing salt lick terminals in areas with minimal human activity.

**Keywords:** *Elephas maximus sumatranus*, forage, salt lick, cuticle microhistological analysis, and kernel density

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