

INTISARI

Penelitian ini dilakukan di savana Bekol, Balanan dan Kramat yang termasuk dalam kawasan Taman Nasional Balurari Jawa Timur. Tujuan dari penelitian ini adalah mempelajari struktur populasi *Acacia nilotica* Willd., variasi kerapatan masing-masing tingkat hidup (semai, sapihan, tiang dan pohon) antar savana, dan pola persebaran spasialnya.

Struktur populasi tersusun dari hasil perhitungan kerapatan (N/ha) pada setiap tingkat hidup. Variasi kerapatan antar savana diuji dengan analisis varian taraf uji 0,05. Pola persebaran spasial diketahui dengan menghitung nilai indeks dispersi (*Variance to Mean Ratio*).

Hasil penelitian menunjukkan bahwa struktur populasi *A. nilotica* di ketiga savana mempunyai kecenderungan kerapatan yang meningkat dari tingkat pohon ke tingkat semai. Kerapatan tingkat semai, tiang dan pohon antar savana tidak menunjukkan adanya perbedaan. Kerapatan tingkat sapihan di savana Kramat lebih rendah daripada kerapatan di savana Bekol dan Balanan. Pola persebaran spasial tiap tingkat hidup populasi adalah mengelompok.

ABSTRACT

This research conducted at Bekol, Balanart and Kramat savanna, of Balurari Rational Park, East Java. The objectives of this research were to study the population structure of *Acacia nilotica*, variation of density at each growth stage (seedling, sapling, pole and tree) among savannas and their spatial distribution pattern.

The population structure was composed by density (N/ha) at each stage. Variation of density of each stage among savannas was tested by analysis of variance at significance level 0,05. Spatial distribution pattern was analyzed by counting their index of dispersion (*Variance to Mean Ratio*).

The result of research showed that the population structure of the three savannas have a tendency of density ascending from tree stage to seedling stage. Density of seedlings, poles and trees among savannas did not show a significant difference. Density of sapling at Kramat savanna was lower than density at Bekol and Balanan savanna. Spatial distribution pattern of each growth stage of population was clumped.