

**NEW VALUE INDEX OF COVERAGE DEVELOPED BY
MEANS OF FACTORIAL ANALYSIS TO CLASSIFY SPECIES
OF NATIVE FORESTS**

Mauricio Koubay do AMARAL¹
Sylvio PÉLLICO NETTO²
Christel LINGNAU²
Afonso FIGUEIREDO FILHO³

- **ABSTRACT:** *The objective of this work was to propose a new methodological tool, developed through the technique of Factorial Analysis to classify species of Native Forests in relation to the index of value of coverage proposed by Braun-Blanquet. The data are derived from the sample survey of 2008, conducted in a fragment of Mixed Tropical Forest, located in Parana plateau, between the municipalities of FernandesPinheiro and Teixeira Soares, 5 km of Irati, PR. The results indicated that the residual matrix reproduced properly the original sample correlation matrix (**R**). The data were discussed through the exposure in a table and by means of the spatialization of the species. This occurred with the purpose to show the equivalence of the values, in relation to the spatial dispersion of individuals, from the survey of permanent plots. The analyzes indicated that the two factors explain 92,0% of the variance of the three variables, in addition to which the variable density has 85% of its variance explained by these two factors, as well as the dominance and frequency are with 94% and 97 %, respectively. In addition, it is concluded that the new methodology can be employed as appraiser of the level of value of coverage of the species, because the results of the index value of covering and weighted vector were similar.*
- **KEYWORDS:** *Multivariate analysis; Araucaria forest; spatial behavior of the species.*

¹ Universidade Tecnológica Federal do Paraná – UTFPR, Departamento de Matemática., CEP: 80230-901, Curitiba, PR, Brasil. Email: amaral@utfpr.edu.br

² Universidade Federal do Paraná – UFPR, Departamento de Ciências Florestais, CEP: 80210-170, Curitiba, PR, Brasil. Email: sylviopelliconetto@gmail.com; lingnau@ufpr.br

³ Universidade Estadual do Centro-Oeste - UNICENTRO, Departamento de Engenharia Florestal0, CEP: 84500-000, Irati, PR, Brasil. Email: afonso@irati.unicentro.br