

SANTA CATARINA STATE FLORISTIC AND FOREST INVENTORY – A STEP TO A NEW FOREST POLICY AND BIODIVERSITY CONSERVATION

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Floristic and Forest Inventory of Santa Catarina (2007 to 2010) is conceived to evaluate forest resources, species composition, structure, and conservation status of forest remnants, providing information to update forest policy. Inventory is also focused on floristics, genetic variability of endangered trees species populations and socio-economic aspects in a highly fragmented forest cover under permanent pressure by agriculture and forest plantations. In accordance to National Forest Inventory, inventory applies systematic sampling, with 440 clusters containing four crosswise 1000m² plots each. All woody individuals of main stratum (DBH ≥10cm) are measured and collected (fertile and sterile), if not undoubtedly identified in field. Regeneration (height >1.50m; DBH <10cm) is registered in 100m² in each sample unit. Floristic sampling includes collection of all fertile trees, shrubs, epiphytes and herbs within the sample unit and in its surroundings. This study performs analysis of woody species based on 96 clusters within an area of 44,362 km² of mixed ombrophyllous forests (500m to 1560m above sea level). Total of 432 tree species were detected. Medium basal area was 25.75m² ha⁻¹ (7.16 to 68.85 m² ha⁻¹). Five percent of fragments showed species composition and structure near to primary forest, 47% were considered under medium impact, 48% under high external impact, mostly in secondary succession. Effective measures has to be submitted to decision makers, including financial compensation of forest owners for their conservations efforts.

Key-words: forest and floristic inventory; tree species diversity; subtropical forests, conservation policy.