

interviewed on their farms and during the interview; we inventoried the number of tree on the farm and determined the farm size. Twenty-one tree species belonging to 14 botanical families were recorded during the surveys and the average stand density of the woody component of farmlands was 7.97 ± 5.43 stems/ha. A number of both native and exotic tree species occurred in the parkland agroforestry systems with dominance of indigenous tree species. Species richness varied with the size of household where households with small land holding conserve more tree species in their field than households with large land holdings. 64% of households surveyed were making deliberate efforts to plant tree species on their farmlands. The most important reasons which determined household ambitions to conserve woody species on farmland were tree products contribution to food and medicine. Results also showed that respondents who noticed that trees were decreasing in the wild conserve more tree species on their farmlands. This research highlights the role of traditional agroforestry practices to support tree species richness and provides evidence of the farms' role as biodiversity reservoirs.

Key words: Conservation, indigenous species, parkland agroforestry, Socio-economic factors.

Predicting the potential distribution of *Ocotea porosa* (Nees & Mart.) Barroso, a threatened species in the State of Santa Catarina, Brazil

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In view of global environmental change, caused mainly by human activity, species distribution models have become an important tool for management and conservation of biodiversity, particularly for threatened species. In this study, our objective was to model the potential distribution of *Ocotea porosa* (Nees & Mart.) Barroso, a threatened species in the State of Santa Catarina, Brazil. The occurrence data were obtained from individuals with diameter at breast height (DBH) >10 cm in 440 permanent plots from the Forest Inventory Floristic Santa Catarina. A 21-environmental variable data set (WorldClim) was related to occurrence data (generalized linear models) to predict the potential distribution of species. The predictor variables were selected by the AICc and the predictive power of the models was evaluated using the method of cross-validation (k-fold), and utilizing ROC-AUC as a measure of precision. The annual average temperature, seasonal temperature, and seasonal precipitation were the most important predictor variables in the models, indicating a strong relationship between them and the distribution of *O. porosa*. The isothermality was also statistically meaningful. The predictive power of the models was considered good with the average AUC= 0.87 and 0.83 (train and test) and the mean proportion for predicted sites was high (0.85 and 0.79 correct). The results showed great performance of the models in the potential distribution of *O. porosa*, such that they could be an important tool to guide future strategies of conservation or subsequent studies, for example, the effects of global change on this species.

Key words: species distribution models, conservation of biodiversity, threatened species.