Inventory and Selection Criteria Analysis of the Specie *Dipteryx odorata* (Aubl.) Willd. (Cumaru) Aiming Saw Wood Production

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Abstract

Wood exploring companies in the Amazon forest are obliged to present the management plan of the area and to execute them, when it is approved. The fiscalization inefficiency, by the public agencies facilitates the non fulfillment of the law. Enterprises that possess the forest management certification by FSC (Forest Stewardship Council) had adhered voluntarily the certification. In the certified forest management plan, one of the most important stages is the inventory of the area that will be explored, therefore supplies information of volume and species that will be removed from the forest. The lack of control and criteria for trees selection that will be explored can impact forest and cause damage to the company. The applied methods on species selection to be harvested for saw wood production are little efficient. The criteria selection depends to a large extent on the consuming market and the wood offer at the explored area, not considering the possibilities of low wood quality in function of factors as site or lack of manpower qualification that, identification and selection of trees at the field. This translates, in a practical form, in saw wood incomes sufficiently different for the same specie proceeding from different places. If there is no improvement in the productive chain since the beginning, moves inefficacy and low income to the subsequent stages, what reduces the sustainability of the forest chain. The purpose of this study was to analyze the inventory accomplished by a certified company by the FSC and the selection criteria of the trees that will be abated to produce saw wood. The work was accomplished in an area of 300 ha in a district of Porto Velho (Rondônia, Brazil) (Vista Alegre do Abunã). The company was certified according to principles and criteria of the FSC. It was observed 63 trees, classified previously as cumaru. These trees had been identified and the data of the company inventory had been collated with the new identification of these individuals. To observe the selection criteria it was used the method of impulse tomography at the individuals of *Dipetryx odorata* (Aubl.) Willd. (Family Leguminoseae - Papilomioideae (cumaru). It had been analyzed 17 trees of *Dipteryx odorata*, with bigger or equal DBH of 49 cm. After the reading by the tomograph, the images had been analyzed by software TNT MIPS 6.8. The analyses had shown that the 63 observed trees, only 27% of them (17 trees) were cumaru (*Dipteryx odorata*), the others 46 individuals were other species. This stage presented imperfections that will be transmitted throughout all the productive chain, harming the ecosystem. The trees selection was inefficient; it does not have clear criteria to select the tree, only the DBH that limits the exploration. The wood quality is compromised by the presence of hollow and affects negatively the income in saw wood. The ambient and economic cost of the cut, the transport and log sawing of a hollowed tree is vast, therefore the conversion into product will be very small and the generation of waste, enormous.

Keywords: Forest species selection, impulse tomography, forest management, cumaru.