Chapter 3

Plant diversity of the bauxite plateaus of North East Suriname

Hans ter Steege, Olaf Bánki and Paddy Haripersaud

The laterite-bauxite plateaus in North East Suriname form a large geological formation, locally called the Brokolonko formation, and include, among others, the Nassau, Brownsberg, Winti Wai, Hok-a-Hin, Stonbroekoe, Majordam, and Lely Mountains. These plateaus together cover less than 0.5% of Suriname's land surface (Figure 3.1) and may constitute a rare and endangered landscape type.

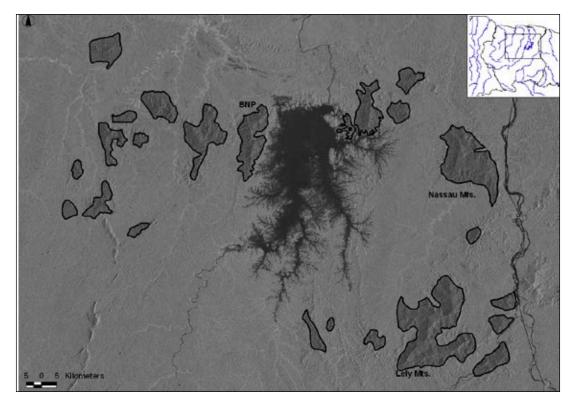


Figure 3.1. Bauxite caps (Brokolonko landscape) of Northeast Suriname as indicated by the 1977 soil map (CBL 1977).

Because most of these formations are laterite-bauxite plateaus (including Nassau, Lely and Brownsberg), they are attractive sites for open pit bauxite mining. Each has been explored for aluminium ore, and several have mining concessions located within their boundaries. Recently mineral exploration has been carried out in the Brownsberg Nature Park (BNP), affecting its status as an undisturbed and protected natural area.

In January and February 2003 the National Herbarium of the Netherlands – Utrecht Branch (NHN-U) and the National Herbarium of Suriname (BBS), with logistical support from SURALCO, carried out a botanical expedition to the Nassau Mountains (Bánki et al. 2003). During this expedition numerical data on tree diversity were obtained by establishing five and a half 1-ha plots, while general plant collecting surveys were conducted to obtain an insight into the flora of the Nassau Mountains.