# **BIOTA-FAPESP PROGRAM**



## PARTICIPATIVE ETHNOBOTANY: CONSERVATION AND LOCAL DEVELOPMENT IN SERRA DO MAR STATE PARK - PICINGUABA, UBATUBA, SP, BRAZIL

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Figure 1. Local partner, Ginacil, interviewing one of the specialist and, in the back, one of the researchers taking notes of the interview (Photo: Thamara Sauini, 2016).

**Introduction:** Studies on ethnobotany that use a participatory approach propose active involvement of local people in its various stages, in order to promote, among other things, local culture strengthening and their empowerment on decision-making about the use of resources available at their environment, aiming local development.

**Objective**: To develop ethnobotanical surveys between two Quilombos in Serra do Mar State Park - Picinguaba, Ubatuba, Brazil - with participation of its residents called "local partners"; and to produce potential conservation diagnosis of raised plant species.

**Methodology**: This project will progress in two phases. In phase 1, courses will be offered to "local partners" about plants collection and ethnobotanical data. The partners, together with technical team, and using ethnobotany methods and techniques, will select and

interview experts about various categories of plant use: construction, medicine, food, technology, fuel, among others. Data of each plant used will be noted on specially chips designed for this project, respective plant will be collected and deposited in herbaria: Municipal-SP Herbarium (PMSP) and the Forestry Institute (SPSF). In phase 2, potential conservation diagnosis of plants (the ones collected in Phase 1) will be performed by calculating the Conservation Priority Index (CPI), associated with ecological and phenological data, as well as bibliographic data of each plant conservation status.

**Expected Results**: The traditional knowledge registered in both quilombos will be systematized, analyzed and compared. Still, data about potential conservation diagnosis of species used by these communities in the Atlantic forest will be obtained; both will generate scientific publications. Moreover, such data will be used for the production of booklet and / or audiovisual documentary, as well as on themed trails construction, contributing to tourism activity. The development of this study will contribute to advancement of ethnobotany research, promoting participation of local inhabitants in the registration of their own knowledge; above all, it will bring progress to ethnobotanic methods that aim conservation and local development, since these have been one of the focus of current studies in this knowledge area. In addition, as a continuation of this project, in medium term, we intend to build a management plan of at least one of those plants, with the local residents participation.

### SUMMARY OF RESULTS TO DATE AND PERSPECTIVES

Local collaborators were trained on anthropology methods for interviews and botany, aiming at collecting the plants indicated during the interviews. Until November 2016, during 45 days of fieldwork, 13 specialists have been interviewed by the five "local partners" (*Figure 1*). Although we have tried to separate the interviews by specialties, we have noted that all of them have indicated plants for different uses.

The 6 interviewed living in Quilombo da Fazenda (QF) have indicated 121 plants for 171 uses (*Figure 2A*); while 147 plants have been indicated for 177 uses by the seven interviewed from the Quilombo Cambury (QC), *Figure 2B*. For medication it was cited 81 (47%) plants by the interviewed living in QF and 62 (35%) at QC; 43 for food/ spices (25 % - QF) and 50 (28%-QC); 25 for construction (15%-QF) and 21 (12%-QC); 7 indications for handicraft (4%-QF) and 33 (18,6%-QC), among others. Some plants are used for more than one indication, as it is the case of some palms which they eat the fruit and the apical meristem, use the bract for handicraft and the wood and leaves for construction.



Figure 2. Local partner, Silvestre, with one of the plants collected (Photo: Priscila B. Yazbek, 2016).

Of the 268 plants cited in total, 182 have been collected until the moment (*Figure 3*) and are being identified and deposited into the Municipal-SP Herbarium.



Figure 2A. The main categories of use of the 121 plants cited by the 6 interviewed at Quilombo da Fazenda (QF). Figure 2B. The main categories of use of the 147 plants cited by the 7 interviewed at Quilombo do Cambury (QC).

12%

for

construction

16%

others

Also, about 35 hours were recorded by means of audiovisual by the team, with the purpose of recording the ethnobotanical surveys conducted by the residents themselves, aiming to produce a documentary. Our team also held a workshop among the residents of Quilombo da Fazenda (QF) on how to make soaps, candles and ointments from the Atlantic forest plants.

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