

Project Update: September 2011

The project started by an exploratory field visit and some meetings with services, departments and NGOs working in and around the two reserves concerned by the project (May 2011). From July 2011 to now, data have been collected in the Lama Forest Reserve and in the Pendjari National Park. The results are the following

1- Data Collection on Shea Tree in the National Park of Pendjari (Northern Benin)

A field team has been trained and field material has been prepared to collect data on pollinators. But unfortunately, shea trees were not in flower and pollination activity was difficult to assess. However, I decided to gather data on shea trees production and morphological traits in different habitats in order to assess the impact of pollinators on the shea tree production and morphological traits. It is supposed that pollinators are more abundant in the Park than in the outside. We gathered the following data on 30 trees per zone (Park, Hunting Zone, and Zone of occupation controlled village land fallow): density, dbh, crown diameter, branches number, fruit Number, and fruits shape. The distance between two trees sampled is at least 10 m. On each tree, we collected 15 leaves to assess morphological parameters based on the shea tree descriptors. Moreover, we measured (length, wide, height, etc.) a minimum of 10 fruits randomly selected on each tree.

In addition, we made a survey among 80 local community members (farmers, hunters, etc.) coming from five ethnic groups (Gourmantchés, Berba, Fulanis, Wama and Bourba) to assess their perception on the importance of pollination and on the shea tree status.

2- Data collection on cowpea in the forest of the Lama the following principles

After the basic training of the field assistants, we installed 32 plots from which 16 in the reserve and 16 outside the reserve (in farms). The minimum distance between the two kinds of plots was 35 km. The plots are experimentation sites where we planted the cowpea. Each plot is a property of a farmer or a group of farmers selected during the exploratory field visit. Before planted the cowpea, we assure that it was treated by a chemical product to avoid the destruction during the first stage. On each of the 16 plots per zone, eight were further covered by nets to avoid pollinator's frequentation and, for the other eight pollination are possible. The farms are currently followed and a collection of insects is being done simultaneously to gather a data base on pollinators in Benin. For the monitoring of pollinators, we choose 10 individuals per experimentation site and gather through a-15-minutes-observation, data related to the number of new flowers, the number of new pods, the insect visiting the flowers and the visiting frequency. The monitoring is still continuing and data are being analysed to have a scientific basis for comparison.

3- Awareness Sessions

We developed some important tools to raise awareness such as a spot which highlights the importance of pollinators for biodiversity conservation and food security. The spot have been diffused on three national TV and upload on YouTube site. The link is the following: <http://www.youtube.com/watch?v=DrQP32bN86U>

The spot have been put on 45 CD and distributed among NGOs, public administration, university to assure a long term diffusion of the spot for awareness everywhere it is required.



Left: Bees on Shea Fruit in Pendjari Park. Right: Collection of Shea fruits for local uses.



Left: Covering plots with nets for experiments. Right: Discussion with a farmer for experimentation plots choice.



Left: Flowering Cowpea on farm Lama Forest. Right: *Vitellaria paradoxa* measurement with Calliper.