Brazil Gets Country's First Endangered Species Laboratory

Contributed by Inácio França
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Brazil's first Laboratory for Conservation of Endangered Species will be housed in the Federal University of Rio Grande do Norte (UFRN), in northern Brazil. The unit will be built and equipped with federal funds from the Studies and Projects Funding Body (Finep) and from the Bank of Northeastern Brazil (BNB).

The laboratory will be headed by Egyptian agronomist Magdi Ahmed Ibrahim Aloufa, Vegetable Physiology professor at the university.

Construction of the laboratory is at its final stages, with equipment about to be installed. According to Magdi Aloufa, when it is operating, the laboratory should be capable of accommodating in several 20-square-meter rooms, some 200,000 saplings of plants native to the caatinga (a dry shrub land in northeastern Brazil), the Atlantic Forest and other biomes of the Northeast of Brazil, as is the case with pau Brasil (Brazil wood), angico, jurema and umbu.

"Apart from preserving biodiversity of forests and other Brazilian ecosystems, the main objective of the laboratory is to operate as a germplasm bank, supplying cloned and genetically improved plants to reforestation projects," explains Aloufa, who graduated from the University of Cairo.

The professor says that currently this kind of laboratory is used when the plan is to keep plants for use in the field, i.e., in nature itself.

"To conserve the same quantity we have in our little rooms it is necessary to have hundreds of hectares. Apart from that, these plants would be exposed to fires, plagues and the action of man," says the Egyptian, who arrived in Natal 24 years ago, married to a Brazilian teacher, after having finished his doctorate at the Pierre & Marie Curie University, in Paris.

Even before the laboratory is ready, Aloufa and his students started the process of collecting plants and saplings from fragments of the existing Atlantic Forest in the state of Rio Grande do Norte and in the caatinga, vegetation that is predominant in the state.

Apart from that, the laboratory already has agreements with universities in several other states in Brazil and in the Arab world, mainly in the United Arab Emirates and Bahrain. It is through this exchange that the laboratory should also conserve species turned to reforestation of savannah areas in the Gulf.

One of the pioneers in biotechnology and cloning of plant species of the Northeast, Magdi Aloufa also coordinated a project that developed date saplings adapted to the climate and earth of the Brazilian semiarid.

Betting on the extreme capacity of the plant that is native to the Middle East of adapting to degraded areas with little water, the researcher invested in the development of saplings capable of assuring the quality and speed of fruit generation.

The Egyptian's bet was based on the economic potential of the product and on the fact that most of the dates consumed in Brazil are imported from Mexico, the only country in Latin America where acclimatized dates are produced.

In Petrolina, in the interior of Pernambuco state, there are some date producers who planted the seeds, which does not guarantee the quality of the fruit.

"Apart from economic arguments, dates offer environmental advantages, as they are palms that fertilize the soil, lowering the temperature and interrupting the desertification process."

The agronomist also developed, with funds from the BNB, genetic improvement of cashew, which started being produced with quality control stemming from UFRN biotechnology laboratory research. Small farmers from the city of Serra do Mel, located 320 kilometers (199 miles) away from Natal, capital of Rio Grande do Norte, were benefited by the initiative.

"The city currently lives off cashew trade, but the fruit produced there grows natively, without quality guarantee," pointed out the agronomist.

Anba