World Magnolia Adventures

Magnolia hamorii

REPÚBLICA DOMINICANA

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On Monday March 12, 2018, we incursioned into Sierra Bahoruco to observe Magnolia hamorii, an evergreen tree 10-15 m, 10-50 cm dbh. Few trees were found on secondary forest. Few fruits, floral buds and flowers were observed (late fruiting, early blooming).

Most trees observed resulted from propagation efforts, 2,500 saplings were grown at Arroyazo 14 years ago by Ramón Castillo, from Reserva Ebano Verde (Fundación Progressio) (see next page for further details) reintroduction took place with help of Francisco Asmar, (now retired, who started an in situ nursery,). Their conservation action succeded, reaching a 60% of sapling establishment under pine trees (Pinus occidentalis) that are now shading and supressing many of the Magnolia trees, so canopy gaps are urgently needed. Natural generation is not taking place yet, many of the reintroduced trees were associated with agroforestry, pine, coffee, pigeon pea, yuca, avocado and Citrus, in stony and well drained soils, with little organic matter and some degree of acidity.

The trip allowed us to meet and help inspire Dominican kids and their parents on saving nature and to enjoy species along the mountain: such as the reddish flowered Tabebuia crispiflora, Erythrina poeppigiana (naturalized), Inga, Solanum, Cedrela, Guarea, Clusia, Melastomataceae, Fabaceae and a pink flowered Flacourtiaceae (Salicaceae) Samyda pubescens.

Further exploration is needed in the Cortico área, 4 km west, straight line, since according to M. en C. Angela Guerrero, from UASD, a different species of Magnolia could occur there, a sterile specimen of Gentry (MO) from that area, shows an affinity to the Haitian Magnolia







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In 2003, the Dominican Environmental Consortium (CAD) project: "Management of Natural Resources in a Sustainable Way in the Sierra de Bahoruco" allowed the PROGRESSIO Foundation, as a member of the CAD to become involved in the project, and in March 2004 presented to the CAD the proposal: "Reproduction and **Establishment of Cachote Ebony Plantations** (Magnolia hamorii) in its Original Zone". Seeds were collected there and the germination tests were conducted at the Fernando Domínguez Center of the Ebano Verde Scientific Reserve, of the El Arroyazo.

Similarly, a small nursery was established in the community of Cachote, Paraiso, Barahona; in the lands of Mr. Francisco Asmar who was interested in reproducing M. hamorii without achieving it. In 2004, two workshops were held: "Seed collection method, management and germination of M. hamorii" for the Green Ebony association of farmers of the Cachote community. In that first year they managed to produce 500 plants in the Cachote nursery and 2000 plants in the nursery of the Ebano Verde Scientific Reserve in the Arroyazo, when these were able to be planted they were taken to the community of Cachote and planted in the fields of the Mr. Francisco Asmar and in lands of other two communities. From this experience we learned: 1) Quantity of seeds per fruit: 28; 2) Number of seeds per kg: 10,000; 3) Germination: 53%; 4) Germination time: Germination begins at 45 days and ends at 120 days. The highest germination occurs from 60 to 77 days. In the year 2005, continuing with the experience, it was possible to produce 500 plants in the nursery of the Ebano Verde Scientific Reserve in El Arroyazo. In the nursery of the community of Cachote nothing was achieved due to poor management of the seeds.

Mr. Francisco Asmar has been one of the men of the community of Cachote with more concern and a great collaborator in search of community welfare. After teaching him the procedure of fruit harvesting, seed processing and germination of M. hamorii he has continued to reproduce some plants by his own means, as he has received only little support from the institutions that are meant to support them, and a little help from his own community. Due to the conditions of advanced age in which he finds himself, he only has kept the great spirit of a fighting man.

