



## **MICROBE-LIFT® Technology Speeds the Breakdown of Plant Litter at a Guatemalan Banana Plantation**

**Location:** Banana Plantation, Guatemala

**Background:** Typical of most banana plantations, this operation left plant litter such as leaves and stalks on the floor of the banana stand in order to decompose and return nutrients to the soil to support new growth. However, it takes significant time for this litter to decompose or “compost” slowing the availability of needed nutrients.

**Objective:** Additional processing of the litter such as mechanical grinding to speed its breakdown was simply not cost effective, however, management considered the slow recovery of nutrients to be a limiting factor in the efficient growth of new crops.

While this was not a typical compost process, a program was developed to assess the ability of **MICROBE-LIFT®** core technology, to speed the breakdown of this litter. Based on the experimental design, **MICROBE-LIFT®** was applied at recommended dosage through the central irrigation system.



**Fig. 1 &2:** After product was added to the irrigation water tank, it was sprayed through the plantation’s irrigation system.

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**Results Achieved:** Within two months after treatment significantly improved composting of the ground litter had been achieved.



**Fig. 3 & 4:** These pictures show dramatic improvement in the breakdown of the plant litter in only two months time.

This trial was considered a success with more rapid breakdown of litter providing a means of increasing nutrient availability for faster growth of new crops.

In addition to providing faster restoration of nutrients, the microbes in **Ecological Lab's** core technology are known to increase plant growth, productivity, and disease resistance in agricultural crops. The growth of these microbes in the plant litter provides an added value fertilizer for the growth of new crops.

For more information on **MICROBE-LIFT®** Technology contact  
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