

## Nitrogen, potassium, boron, magnesium and zinc application to plantain plantations, *Musa* AAB cv. Horn with black Sigatoka incidence

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### Abstract

The leaves close to the soil in plantain crop, *Musa* AAB cv Horn planted in the Maracaibo lake basin, Venezuela are attacked for fungi, that do not reduce fruit quality. Producers do not apply fungicides to leaves it was not necessary. In 1991, the black disease attacked with intensity the leaves and it was begun chemical applications. The disease caused changes in plantation management include fertilization, plants number, defoliation. Of course, a good supplementary water in the dry periods, and high level of nitrogen and potash fertilization plus minor elements (B, Mg and Zn) as a way for living with black disease attacks. Corms from 1.20 m high suckers were planted at 2.5 × 2.5 m in divided plots with 2 NK rates and subplots with B, Mg or Zn, plus a subplot without this three elements. The flowering period was initiated at 179 days and the harvested period at 286 days after planting. There was no correlation neither bunch weight and plant cycle, nor between leaves number at flowering and harvesting time. The harvesting leaves number variations was 0 to 8. Application of B, Mg and Zn showed larger leaves number harvesting in B plots, particularly with NK high rates and the Zn application under similar conditions increase the yield in 20%. **Key words:** Horn clon, *Musa* AAB, N, K, B, Zn, Mg, fertilization, plantain.

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