Boron in Soy and Corn

Study Details

Date: 2017-2019

Location: Fundação MS, Mato Grosso do Sul, Brazil

Soil: Two locations with different soil texture: Sandy (Navirai) and clay (Maracaju)

Fertilizers: For both crops, boron was tested at rates of 0, 1, 2, and 4 kg B ha^{-1} using *Granubor*® (sodium tetraborate) as the fertilizer source

Crop: In both locations, soybean was planted during the summer (rainy season) followed by winter corn (safrinha)

Trial design: The fertilizer was broadcast-applied 1 day before planting. In the case of corn, two different times of boron fertilizations were tested:

1) 100% at pre-planting of soybean
2) 50% at pre-planting of soybean and 50% at pre-planting of corn

Results

The preliminary data from the 2017/2018 growing season showed no statistical difference for the time of boron application for corn. The preliminary data from 2017/2018 showed statistical grain yield benefit of 384 kg ha^{-1} of 1 kg B ha^{-1} over control for soybean in the Maracaju location. The grain yield difference in the Navirai was of 264 kg ha^{-1} but not statistically different.

Boron in Soy and Corn