

A Ciência na Redução  
das Desigualdades do Campo  
**VIII Semana Agrônômica**

**DISEASE CONTROL AND CORN PRODUCTIVITY DEPENDING  
ON THE PHOSPHITE AND FUNGICIDE APPLICATION**

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The objective of this work was to verify the control of corn diseases and productivity as a function of phosphite and fungicide application. Two experiments were conducted in the agricultural years 2014/2015 and 2015/2016, under cerrado area, in the municipality of Gurupi, Tocantins. The experiment was carried out in a randomized complete block design, using a factorial scheme of 4 (fungicide, phosphite, fungicide plus phosphite and water), x 2 (maize hybrids, AG7088 PROX and 30F53YH) with three replicates. The products were applied in the stages with eight leaves and pre-plowing. The area under the Disease Progress Curve (AACPD) was calculated for diseases found, a thousand grain mass and productivity. The hybrid AG7088 PROX presented low severity of the diseases found: bipolaris spot, polysorbite rust, leaf anthracnose and curvular spot. In the genotype 30F53YH, it was verified a higher AACPD of the polysor rust, being its control more effective with the application of the fungicide isolated and in mixture with the phosphite. The isolated application of phosphite did little to reduce the AACPD of the diseases when compared with the fungicide alone or in mixture with the phosphite, but greater productivities were obtained with the use of the phosphite alone or in mixture with the fungicide.

**Palavras-Chave:** Zeas mays, alternative control, Bipolaris maydis, Puccinia polysora, Colletotrichum graminicola, Curvularia sp.