Title Fusarium mycotoxins in isogenic and Bt maize varieties grown in different geographic areas in France.

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## **Abstract**

Four maize varieties collected in four sites in France in 2000, with and without the character of resistance to insect borers (Bt character), were compared for *Fusarium* spp. contamination and mycotoxin production in kernels (trichothecenes, fumonisins, zearalenone). For three of the considered varieties, lower *Fusarium* contamination and mycotoxin content were observed on Bt hybrid maize than on the corresponding isogenic variety. Fumonisin concentrations ranged from 9.5 ppb to 307 ppb for Bt varieties, and from <3 ppb to 1300 ppb for isogenic ones. Low concentrations of trichothecenes were measured in transgenic as well as in traditional maize. With the exception of two of 15 samples, zearalenone concentrations were below the 200-ppb limit recommended in France. Although not significantly different, these results suggest a decrease in mycotoxins kernels content linked to Bt hybrid.