The aim of this study was to evaluate the effects of arbuscular mycorrhizal fungus (AMF) *Glomus mosseae* on the growth and nutrient uptake of Bt corn 5422Bt1 (event Bt11) and 54225CBCL (event MON810), and their non-Bt isolate 5422, under different soil phosphorus levels. Soils for each corn hybrid were either not inoculated (control) or inoculated with *G. mosseae* under the P level of 127 (low P concentration) or 227 mg kg$^{-1}$ (high P concentration). No adverse effect was detected on the AMF colonization in roots of Bt hybrids. However, the same hybrid growing under low P concentration was presented significantly higher percentage of AMF colonization of roots than that growing under high P concentration. No apparent effect of AMF on Bt protein concentration, soluble sugar content, and root activity of plants concentration was found under either high or low P concentration. In addition, plant growth and the uptake of P and K (Potassium) were increased by AMF inoculation, though the positive effect of AMF varied in corn hybrids.

Keywords: arbuscular mycorrhizal fungi, phosphorus level, Bt corn, nutrient uptake