

The use of *Bacillus thuringiensis* (Bt) maize gene was commercialised by the South African Government in 1998. This gene makes the maize resistant to maize stem borer thereby improving production. However, despite the efficiency of any given technology, there are always factors which encourage or discourage farmers to adopt and these need to be identified. This study was therefore carried out to determine the factors that influence adoption of Bt maize among 121 developing maize farmers in Gauteng Province, South Africa. Using a logistic regression model, the findings show that a set of socio-economic factors influence farmers' decision to adopt Bt maize technology from 2011 to 2014 maize production season. Policymakers should pay closer attention to such factors to stimulate the scaling up in adoption of Bt maize technology and ensure its sustainability. This will help improve productivity and curb maize shortages currently facing the country and the world over.