Bt cotton adoption and variety market development: The Chinese case

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In China, Bt-cotton varieties are widely adopted since 1997 to help control attacks of

Helicoverpa armigera, a major pest on cotton crop. Most studies have related this adoption

only to the specific advantages of Bt-cotton, e.g. in terms of reduction in pesticide use. This

reason appears not to be sufficient as this specific advantage has been put into question in

more recent papers, which also raised the issue of seed prices.

By referring to datasets seldom used in earlier analyses, we argue that Bt-cotton use in China

has benefitted a lot from the development of the cotton variety market and it could suffer if this

development is not effectively regulated. Since mid-1990s, a favourable legal framework has

been set up and it resulted in the development of a competitive variety market. But free-wheel

development led to the current stiff competition which is responsible for quality uncertainty

and possibly for high seed pricing. The profitability and continued use of Bt-cotton is under

threat, as well as the pursuit of the development of the variety market. Actions have been

conducted to regulate this market, but their effectiveness is debatable.