



Universiteit
Leiden
The Netherlands

Genetically modified (GM) corn in the Philippines : Ecological impacts on agroecosystems, effects on the economic status and farmers' experiences

Mabutol-Afidchao, M.B.

Citation

Mabutol-Afidchao, M. B. (2013, November 20). *Genetically modified (GM) corn in the Philippines : Ecological impacts on agroecosystems, effects on the economic status and farmers' experiences*. Retrieved from <https://hdl.handle.net/1887/22273>

Version: Corrected Publisher's Version

License: [Licence agreement concerning inclusion of doctoral thesis in the Institutional Repository of the University of Leiden](#)

Downloaded from: <https://hdl.handle.net/1887/22273>

Note: To cite this publication please use the final published version (if applicable).

Cover Page



Universiteit Leiden



The handle <http://hdl.handle.net/1887/22273> holds various files of this Leiden University dissertation

Author: Mabutol-Afidchao, Miladis B.

Title: Genetically modified (GM) corn in the Philippines : ecological impacts on agroecosystems, effects on the economic status and farmers' experiences

Issue Date: 2013-11-20

Genetically Modified (GM) Corn in the Philippines

Ecological impacts on agro-ecosystems, effects on the economic status and farmers' experiences

by Miladis B. Mabutol-Afidchao

1. GM corn containing *Bt* endotoxin is effective against Asian corn borer (ACB), *Ostrinia furnacalis* Guenée but the impact of ACB is not reduced to zero and some ACB larvae are able to survive the exposure to *Bt* endotoxin. - This thesis
2. In the Philippines, the sprayed non-GM cornfields harbour more invertebrates than unsprayed GM cornfields - This thesis
3. Continuous and long-term cultivation of *Bt* corn may affect certain groups of invertebrates differently than short-term cultivation. - This thesis
4. Farmers' in depth knowledge about GM corn and perceived pecuniary benefits influences the level of GM corn adoption in the Philippines. - This thesis
5. Presently, iso-hybrid non-GM corn is as economically viable as GM corn in the Philippines. - This thesis
6. In temperate regions, non-target organisms are more abundant in unsprayed GM *Bt* cornfields than in sprayed non-*Bt* cornfields. - Marvier *et al.*, 2007
7. GM *Bt* corn can lead to yield increases and reductions in the costs of pesticide application hence, higher economic performance than non-GM corn. - Finger *et al.* 2011
8. Any application of non-natural pest control may have side effects in that non-target organisms are negatively affected.
9. Peer reviewed studies on the effects of GM corn are almost exclusively from the temperate regions and there is a need for more studies in tropical regions, especially in biodiversity hotspot countries like the Philippines.
10. "Communities experiencing moderate amounts of disturbance will have higher levels of species richness than communities experiencing little or great amounts of disturbance." - Mason *et al.*, 2011
11. "Every right implies a responsibility; every opportunity, an obligation; every possession a duty." –John D. Rockefeller Jr., speech (1941)

