UPDATES ON THE POST COMMERCIAL MONITORING OF BT CORN

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? Monitor Bt Corn?

Why?

Is it different from an ordinary hybrid corn?

Some Reasons

- *Bt corn is a hybrid corn
  *It looks like an ordinary corn
  *The only difference is the method of breeding used – modern biotechnology, a short cut of conventional/natural breeding,

*resistant to corn borer,with gene from a bacteria
*monitored for corn borer resistance development

Bt Corn

In the Philippines vs In the USA
*Approved for propagation in the Philippines in Dec.2002
*Approved for propagation in the USA in 1996

*20% of total hybrid corn area in 2005 in the Philippines
*30% of total corn area in 2005 in USA
*Both have no record yet of corn borer resistance to Bt

Philippine IRM Strategies

*High dose
*95% cap on sale
*80% adoption in a minimum of 200 hectares contiguous area
*alternate host as refuge
*crop rotation

On-going research studies in relation to IRM

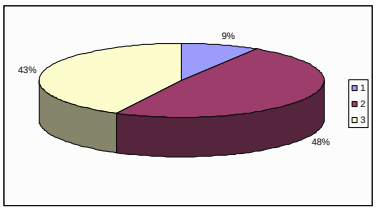
*Post commercialization monitoring of Asian corn borer, Ostrinia furnacalis,(ACB) resistance to Bt corn in the Philippines

*Mating Behavior and Ovipositional Preference and Total Development of Asian Corn Borer on Bt and non-Bt Host

Bt Corn Adoption

*Total number of hectares planted to Bt corn from 2003-2005= 122,821 (49% of hybrid corn area)

*total number of hectares planted to Bt Corn:
2003=10,769(4%)
2004=59,850(24%)
2005=52,202(20%)



Bt Corn Adoption

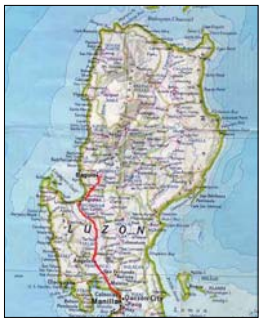
*based on 2003-2005 plantings:

Luzon	102,739 hectares
Mindanao	19,011 hectares
Visayas	1,071 hectares

Bt Corn Adoption

*based on 2005 alone:

Luzon	44,085 hectares
Visayas	485 hectares
Mindanao	7,632 hectares



Bt Corn Adoption
first 3 provinces in each island with the total highest hectarage from 2003-2005

<u>Luzon</u>

Isabela	34,216
Pangasinan	23,517
Cagayan	10,892

<u>Mindanao</u>

South Cotabato	5,013
Sultan Kudarat	4,921
North Cotabato	2,586

<u>Visayas</u>

Iloilo	400
Capiz	361
Cebu	168

Bt Corn Events for Propagation
(as of 28 April 2006)

1. MON 810
2. Bt 11
3.MON 810 x NK603