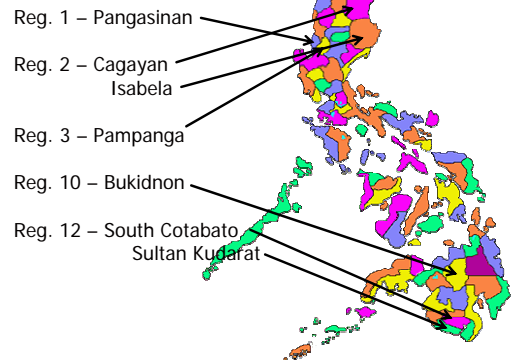


Farmers' Experiences on Bt Corn Farming: A National Survey

4th National Corn Congress
4-5 May 2006

Godfrey P. Ramon
Biotechnology Coalition of the Philippines

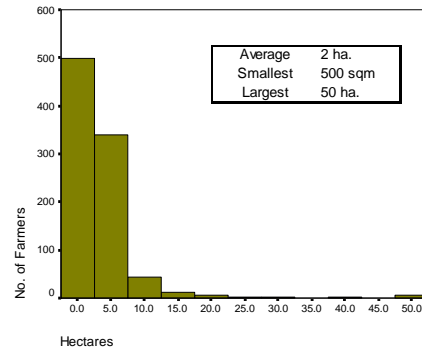
Survey Sites



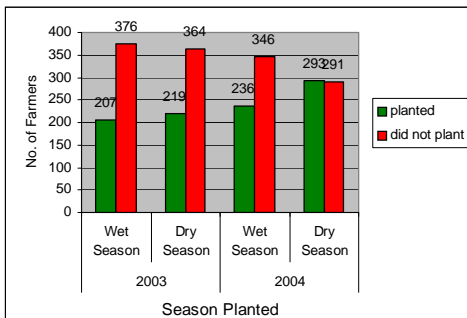
Years of Farming Experience

Average	18.6
Most common	20
Minimum	1
Maximum	60

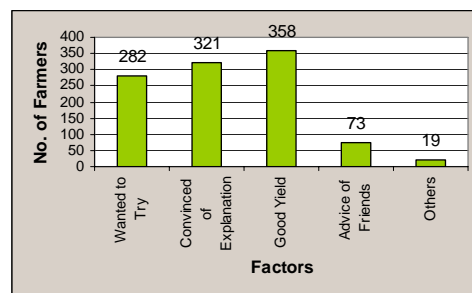
Farm Size



Bt Corn Planting by Season



Why They Planted Bt Corn



How Many Were Satisfied With Bt Corn?

	No. of Farmers	Percent
no	29	3.1
yes	687	74.2
no response	179	19.3

Reasons for Satisfaction

	No. of Farmers	Percent
increase in yield/income; good harvest	160	40.2
resistance/protection against corn borer/pests	155	38.9
no/less spraying/pesticides/chemicals	32	8.0
effective/proven/tested/many benefits	24	6.0
economical/cost efficient/less input costs	21	5.3
others	6	1.5

Yield Comparison

	Dry Season (mt/ha)	Wet Season (mt/ha)
all farmers	4.87	4.73
Non-Bt corn farmers	4.40	4.33
Bt corn farmers	5.07	4.91
yield advantage	15.23%	13.39%

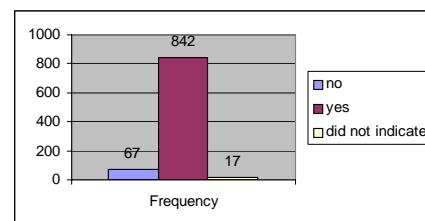
Yield Advantage

	Dry Season (mt/ha)	Wet Season (mt/ha)
Gonzales (2004)	<u>23%</u>	<u>20%</u>
Yorobe (2004)	<u>35%</u>	<u>33%</u>

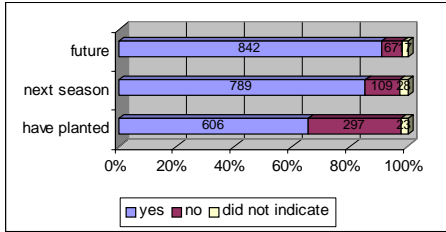
Reasons for Non-Satisfaction

	No. of Farmers	Percent
not 100% effective	4	30.8
affected by natural calamities	4	30.8
others	3	23.1
expensive	2	15.4

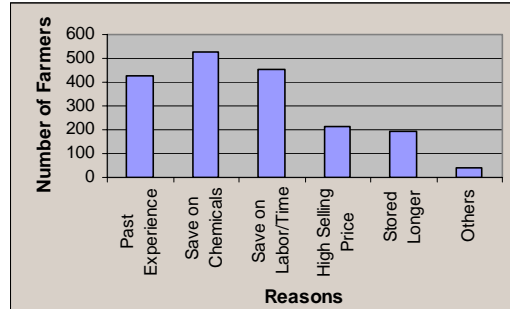
Plan to Plant Bt Corn in the Future



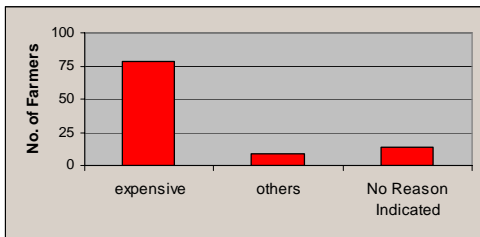
Increasing Adoption



Reasons for Planting Bt Corn in the Future



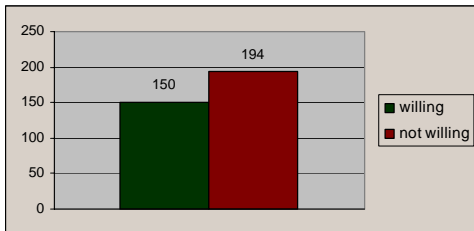
Reasons for Not Planting Bt Corn in the Future



80-20 IRM Strategy



How many are willing to implement the 80-20 scheme?



Acceptability rate = 43.6%

Reasons for Willingness to Implement the 80-20 Scheme

	No. of Farmers	Percent
prevent resistance to corn borer/prolong use of technology	56	27.1
to test if it works	53	25.6
found it good/acceptable	15	7.2
to save on cost of seeds	14	6.8
positive generalizations	4	1.9
conditional reasons	8	3.9
unrelated responses (pertains to effectiveness of Bt corn)	48	23.2
unrelated responses (vague or remote)	9	4.3

Reasons for nonwillingness to implement the 80-20 scheme

	No. of Farmers	Percent
leads to reduced yield/income	39	20.1
hard to implement/not feasible/govt has no capacity	22	11.3
prefer 100% Bt or 95%-5%	22	11.3
20% of cornfarm will be wasted/lost	20	10.3
low adoption rate at present	17	8.8
additional costs/expensive	16	8.2
government should first study well the proposal	14	7.2
alternate hosts available in our area	10	5.2
don't like the scheme	8	4.1
practices intercropping/crop rotation/diversified farming	8	4.1
have limited farm area	6	3.1
ACB is not always present in our area	2	1.0
conditional no	10	5.2

Some Factors Influencing Acceptability

1. REGION of origin

Farmers from R12 tend not to favor the 80-20 scheme; the opposite is true for farmers from R10.

2. BT CORN ADOPTION

Adoptors are more likely not to be willing.

Recommendations

- Improve farmers' appreciation for an IRM strategy
- Explore ways to make Bt corn seeds more affordable
- Consider farmers' suggestions to arrive at an implementable IRM scheme
 - low adoption
 - alternate hosts
 - cultural practices
 - small farm areas
 - varying ACB infestation severity

Bt Corn Adoption Per Major Island

Year	Island	1st Cropping	2nd Cropping	3rd Cropping	Total
2003	Luzon	841	9,282	0	10,833
	Visayas	0	24	0	
	Mindanao	225	461	0	
2004	Luzon	9,648	24,800	6,945	53,158
	Visayas	53	296	185	
	Mindanao	3,760	7,212	259	

Highest Adoption (Luzon)

	1st Season	2nd Season	3rd Season
2003	Isabela- 483	Isabela - 4,908	
	Occ. Mindoro- 127	Pampanga - 975	
	Apayao - 32	Pangasinan- 920	
	Batangas - 32		
2004	Pangasinan- 8,931	Isabela- 8,235	Pangasinan- 5,221
	Isabela - 6,562	Pangasinan- 6,528	Isabela - 2,479
	Cagayan - 725	Pampanga - 2,588	Cagayan- 1,706
		Cagayan -2,519	