

# Attitudes, Economy and Training Issues in Methyl-Bromide Substitution: The Example of the Post-Harvest Sub-Sector

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# Introduction

- Attitudes in fumigation business
- Economic issues
- Training
- Our conclusions

# Attitudes in Post-Harvest Fumigation Business

- Attitude 1: Methyl bromide is the best treatment
- Attitude 2: Alternatives to methyl bromide are too expensive

# Economy

## Assumptions:

- Cost of a mill fumigation with MB: € 25.000,--
- Cost for an alternative: € 50.000,--

# Economy

## Assumptions:

- A mill produces 500 tons of flour/day
- Flour market price: € 0,30/bag (retail size)
- One-day production: € 150.000,--

# Economy



# Economy

Cost for a MB Alternative (assumption):

- € 25.000,-- plus
- € 150.000,-- for one additional day of standstill =
- € 175.000,-- additional cost in comparison to MB-treatment of
- € 25.000,--

# Economy

Assumption:

- 350 days of flour production per year
  - Market value of flour: € 52,5 Mio.
- Additional cost of  
€ 0,001 / 1 kg flour!



# Economy

Heat + IPM



# Economy

## Heat + IPM

Miller: „We learned a lot during the last years on killing insect pests with heat. We made a lot of mistakes. But finally we had success meanwhile over years now. We will never use MB again. We are independent and can start desinfestation whenever we want and production allows it.

**And, it is cheaper than with methyl bromide!“**

# Economy

Heat + CO<sub>2</sub> + Phosphine



# Economy

Heat + CO2 + Phosphine



# Economy

Heat + CO<sub>2</sub> + Phosphine



# Economy

Profume (SF)



# Economy

## Profume (SF)



# Economy

Profume (SF)





# Training



# Training



# Training

- Awareness raising
- Responsible action taking
- Motivation
- Marketing tool

# Training

Assumption:

- 3-days training seminar
- 30 staff members of a mill

Cost:

- € 2.000/person or
- € 60.000 in total

# Training

- € 60.000,-- for training means in other figures additional cost of € 0,0003 / bag of flour

Who cannot afford this??

# Training

- Training Effects:
  - Motivation of staff
  - Early detection of pests and probably prevention of treatment
  - Cost reduction
  - Reduction of MB fumigations!

# Training

Fumigators training:

- Key component for MB substitution
- Precision fumigation techniques
- Alternative fumigants
- Awareness raising on additional IPM issues

# Training

- Customers training:
  - \* Sanitation
  - \* Monitoring
  - \* Preventative strategies
  - \* Cost saving



# Information

on the MB problem should be given to:

- Consumer directly
- Consumer associations

# Conclusions

- Critical use exemptions for MB are often simply the cheapest way
- Alternatives to MB in the post-harvest sector are mostly approved, applicable and efficient
- Costs for alternative methods are not that high as widely discussed

# Conclusions

- Training is a key issue to promote alternative methods
- Provide sound information for consumers

It's our  
future!

