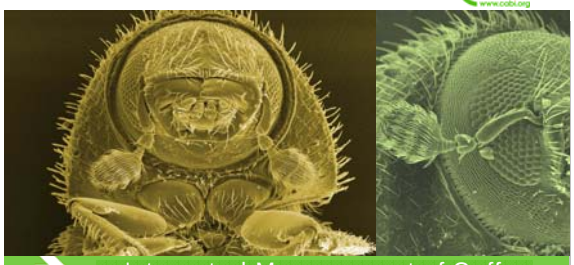


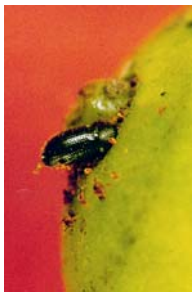
Integrated Management of Coffee Berry Borer ICO/02

PS Baker

www.cabi.org
KNOWLEDGE FOR LIFE

Coffee berry borer CBB

- Now present in almost every coffee country
- Hard to control because of its reclusive lifestyle
- Control measures are costly
- Chemical control is damaging and unhealthy
- CBB causes losses by:
  - Weight loss
  - Quality loss
  - Early berry drop



The basic idea

- To introduce new biocontrol options
- To develop integrated pest management (IPM) solutions – i.e. monitoring, use of decision thresholds, timely action at a vulnerable point in CBB's life-cycle
- To inculcate a participatory research approach because solutions have to be farmer-friendly (i.e. adoptable)
- To get away from a 'top-down' research approach

What it came down to:

- To tackle a major recalcitrant pest problem
- In an environmentally, economically and socially sustainable way
- To introduce new control agents and new ideas
- To try to get them work in seven countries
- To get farmers to adopt - in a limited time

Project had four components

1. The improvement and testing of mass rearing and delivery systems for natural enemies (pathogens and parasitoids) of the CBB (cooperation with USDA),
2. The provision of natural enemies to participating countries, (collecting, culturing, quarantining, releasing)
3. The integration of biological control technologies and other methods for cultural and chemical control to develop IPM systems, (field studies)
4. Dissemination of IPM technology/information and associated training to participating and other countries (training, manuals)

Project had seven countries participating:

- Colombia
- Ecuador
- Guatemala
- Honduras
- India
- Jamaica
- Mexico

Results

- New parasitoid control agents introduced to all participating countries
- IPM plots set up
- Training in farmer participatory techniques, laboratory rearing, field evaluation

Publications

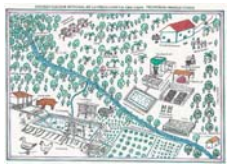
- Final report
- 4 country/region reports
- Participatory manual
- Socio-economic study
- Laboratory manual
- CDs

But what was it really about?

- Projects frequently die away quite quickly after they have finished
- We need a better way to remember not only their results but the broader significance?
- E.g. if we were going to do the project again now, what would we do, or not do?
- Institutional memory is important

It was about change

- A response to the rise in the late 1990s of sustainable certifications and tightening import restrictions on residues
- Use of chemical pesticides was becoming increasingly unacceptable



So did it work?

Only partially, main (structural) problems:

- The project coincided with the worst years of the coffee crisis
- Most of the country-level project leaders were no longer working on CBB a year after the project had finished – some had left coffee all together
- Result – a decline in research and development effort
- Rather few research papers from most countries on CBB
- Agricultural science is not a good career choice any more

But it's not just coffee

International Rice Research Institute

- *"In the 1980s, the institute employed five entomologists, overseeing a staff of 200. Now it has one entomologist with a staff of eight."*

[from NYT article May 18, 2008]

Did it work?

- Ultimately most/all of the countries were in the initial phase of a major cost-price squeeze
- Scarce labour/high wage costs
- With lower productivity than Brazil & Vietnam
- Both leading to insufficient funds to control CBB or to invest in long-term measures
- *"The farmers' capacity to implement H. hampei [CBB] management was considerably reduced by low international coffee prices*" [from a paper by Ecosur, Tapachula Mexico]
- IPM nearly always seems to mean more work

Did it work (continued)?

Another problem:

- Perhaps a failure of perception – were countries expecting a 'magic bullet' solution to the problem?
- The principle concept of the project was that CBB is a pernicious problem and control will take a prolonged effort working on-farm to find the best solutions
- We tried to supply the tools and training, i.e. processes, but could not supply a simple answer to the problem
- Lack of continuity – a project of 3 to 4 years is not enough
- Scientific endeavour is a delicate flower

Above all it was about people

- Many interactions with
  - Farmers
  - Researchers
  - Extensionists
  - Junior researchers & students

It was about people

And not always easy

- One IPM trial farmer migrated to the US during the project
- A project leader later migrated there too (but legally)
- Another scientist worked on CBB in the US
- And never came back

Coping with global change

The project thus had to cope with some of the major global themes of our age:

- Declining importance of agricultural science
- Declining funds available to institutes
- Increasing opportunities outside the sector
- The trend to towards value-addition – through raising quality, entering certification schemes
- A power shift away from national institutions to international standards setters
- Emphasis on farm-level sustainability
- But not institutional or macro-sustainability

These problems are not going away

Final thoughts …

- Now CBB is coming back – due in part probably to more favourable climate conditions
- Change is accelerating
- Another IPM project focus is too narrow
- A change in paradigm needed?
- Some countries with mountain-grown Arabica need a fundamental reassessment of coffee production to stay in business?
- CBB could be seen in a positive light as a needed stimulus to bring about a change in perceptions

- "Coffee must therefore no longer be considered a 'commodity'. Producers of primary material must be provided the knowledge we have gained and increase the remuneration.
- For this purpose, scientific research takes on an ethic and economically important role in sustainable development of many emerging economies."

[Andrea Illy; ASIC, Trieste 2001]

Thank you