Climate-proofing IPM: What are the challenges and opportunities?

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Healthy Harvests – Report, policy brief, video:

- SLU Global: <u>slu.se/en/collaboration/international/slu-global</u>
- CGIAR: cgspace.cgiar.org



Agricultural Sciences



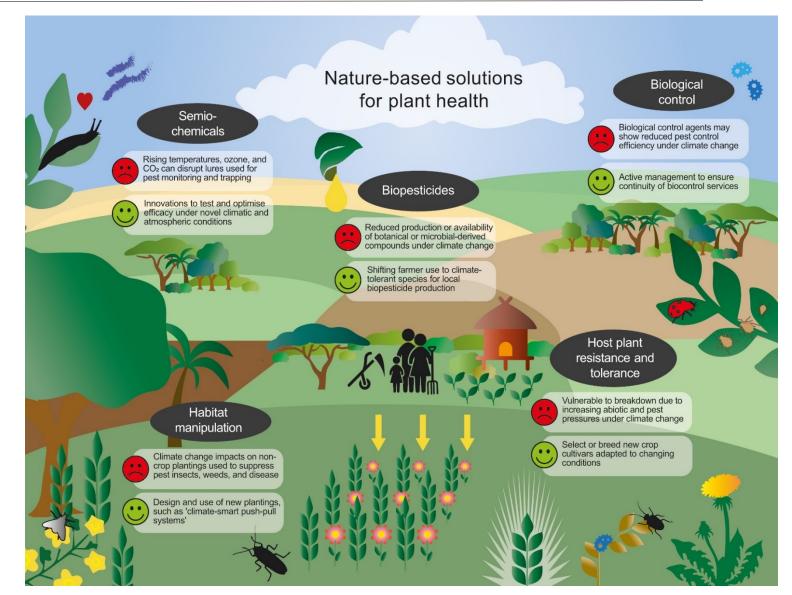






Key messages:

- Five main NBS underpin sustainable plant systems
- Each threatened by CC but also has potential to contribute to adaptation
- 'Climate-smart' IPM as a concept





Agricultural Sciences









Altered:

- Temperature
- Extreme events
- Other abiotic & atmospheric (CO₂ and ozone)

Nature-based solutions for plant health:

Biological

response

Geographic range

Outbreak potential

Damage intensity

Pest:

- Host plant resistance & tolerance
- · Biological control
- Habitat manipulation
- Biopesticides
- Semiochemicals

Human response



- · Food security:
- yield output & stability
- · Food safety:
- pesticide exposure
- mycotoxin exposure

Climate-smart IPM:

- Climate-informed:
- monitoring & forecasting
- advisory services & tools
- reprioritization of management options
- Early action against future climate-risk pests

Implementation support:

- Policy / legislation
- Education advisors farmers, etc.
- Research
- ICT development

Key messages:

- Climate-smart IPM connects to **One Health**
 - o via both food security & safety
- Road-map for implementation includes:
 - Climate-informed advisory services (with regional cooperation)
 - Policy streamlining
 - Co-creation & sharing of knowledge with/among smallholders



- Precipitation

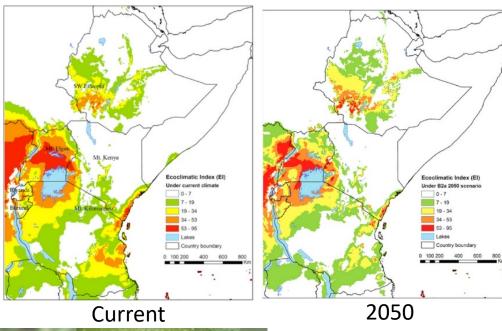






Climate analogues approach: crop, pest & biocontrol response under CC?

- Coffee Berry Borer (H. hampei) = most important pest of coffee worldwide
- Already benefited from temp. rise in East Africa
- Reported increased damage to coffee and expansion in its distribution















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