



Efficacy and risks of “biorationals” in organic and integrated pest management - acceptable?

8th International Symposium on Plant Protection and Plant Health in Europe



*We welcome
72 delegates
from 14 countries*

What are we talking about?

Integrated Pest Management

following Directive 2009/128/EC

Source: JKI



Conventional Pesticides

Pesticides with higher risk to health and environment...



Biorationals

Biological Pesticides with low negative impact to health and environment, such as botanics, microbials, basic substances...

Biological Control

Predators, parasitoides, nematodes, viruses, fungi, endophytes...

Physical & Mechanical Control

Pruning, weeding, mulching, traps, barriers, flaming...

Cultural Control

Site & plant selection, fertilization, sanitation, rotation...

Statement:

„Biorational or biological – different concepts with impact on practical use“

Markus Weinmann, University of Hohenheim

„Biorationals“

- Natural Low Risk Substances (incl. Microorganisms)
- Basic substances

- Biostimulants, especially microorganisms

- Pheromone & Kairomone (Semiochemicals)

- Soil improvers
- Organic fertilizers
- Mineral fertilizers

Efficacy of ‚Biorationals‘



‚Biorationals‘

- Natural Low Risk Substances (incl. Microorganisms)
- Basic substances
- Biostimulants

Efficacy in assessment

- **Moderate – good (variable)**
- **Not tested**
- **Tested in future?**

Sufficient information provided to customer/user?

Are there hidden risks?

We hope that the symposium will answer the following questions:



- Which advantages do biorationals have for organic and integrated plant production systems?
- How effective are biorationals and how should we declare the efficacy for the user?
- Are there risks overseen during the assessment of microbial products?
- Is the regulatory framework sufficiently organised for biorationals?
- How could we promote biorational use and which impediments exist for intensifying the use?

Let's go!