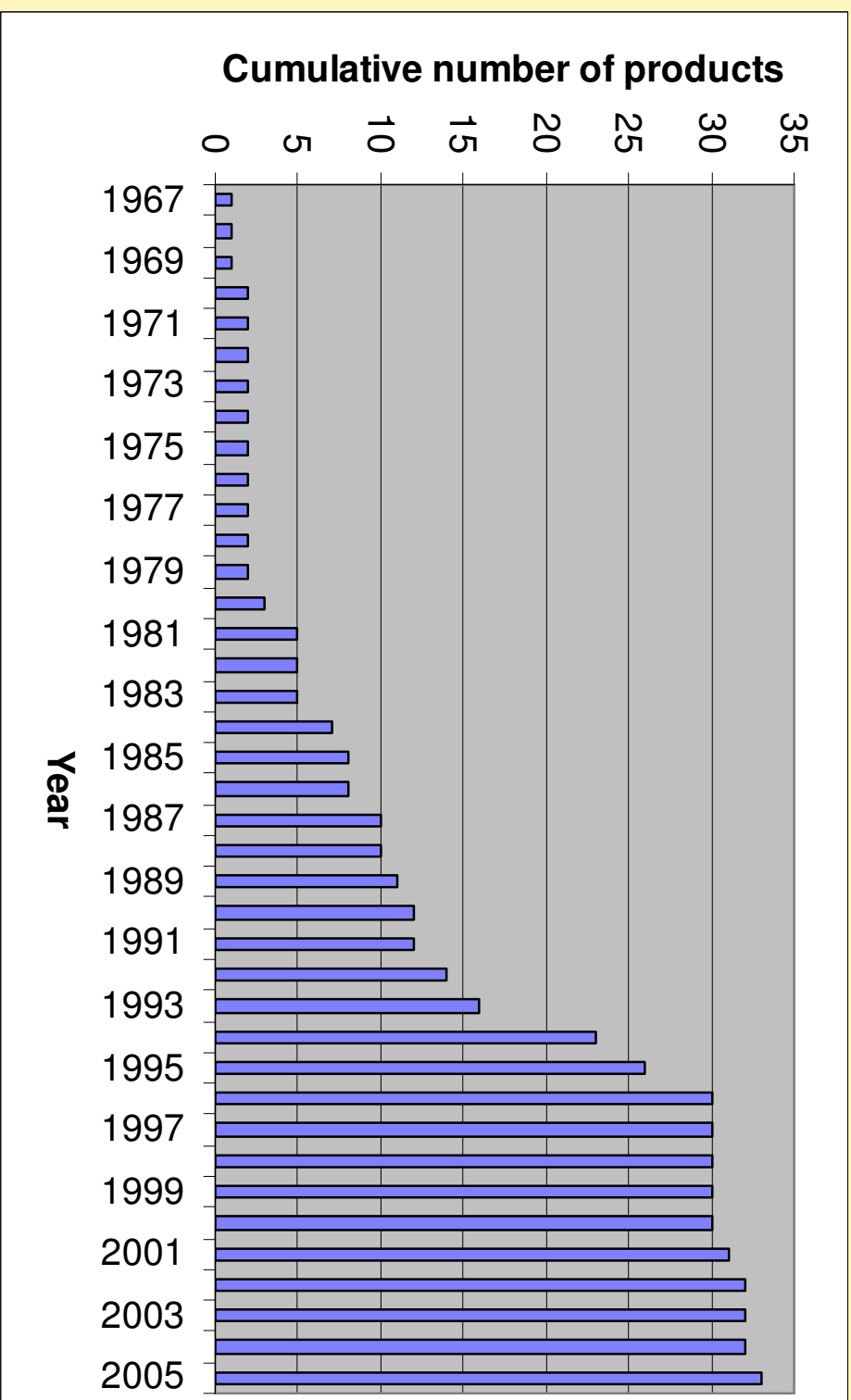




The Future and Importance of New Product Development

Karel Bolckmans

Evolution of the number of available natural enemies



Short History

- 1967: 2 companies
 - Koppert, NL
 - Natural Pest Control, UK
- 1967-1978: *Phytoseiulus persimilis*, *Encarsia formosa*
- 1988: bumblebees, Biobest, BE
- 2005:
 - >30 natural enemies: solutions for all main pests in greenhouse crops
 - ±25 companies, 3 large
 - >125 million Euro

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Reasons for success

- *Advantages* for the grower compared to using chemicals
- Consumer focus on *food safety*
- Until recently no or very limited *regulation*
- Ability to *react fast* to new invasive pests
- Entrepreneurs, *family businesses*, no venture capital
- *Step-by-step* approach
- Key role of *research stations* (Naaldwijk, the Netherlands; Littlehampton, UK) and universities (WUR, NL)
- Close collaboration with *research community*
- Close collaboration with *grower community*
- Advances in product *quality*
- Advances in *reliability*

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Market Situation

- Saturated market in greenhouse vegetables in North Europe and North America
 - ⇒ Price erosion, typical for saturated markets
- Necessity to develop markets
 - Greenhouse ornamentals in N.E. and N.A.
 - Greenhouse vegetables in Mediterranean
 - Others
- Requires development of new products.
- Most new products used to be the result of research by universities and research stations. This has changed now.

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New Product Development

- Expensive
 - Uncertain
- } Few companies invest in NPD
- Many Fast Followers.
 - First Movers are necessary to advance biological control into new markets and crops.
 - Being a First Mover / Innovator only makes sense if you can get your investment back.

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Protecting your investment

- Traditionally in the biocontrol industry
 - Keep production technology confidential
 - Speed: rapid market introduction
 - Differentiation: availability, quality, technical support, knowledge
- Future
 - Patenting (very expensive)
 - Licensing

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Impact of Regulation

- Increasing cost
 - Cost of studies + will they be accepted by all countries?
 - Cost of dossier evaluation
 - Annual taxes and levies (e.g. Sweden)
- Therefore increasing business risk

- Vicious circle !
 - Product development too expensive for small companies
 - No more problem development for small and secondary pests
 - Fast copying of new products from large companies
 - Increasing business risk for NPD

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Permit = Investment

- Equal rights and duties for all companies.
- Studies should be confidential (data protection).
- Each company should apply for its own permit, by doing its own studies.
- Possibility for all companies to use the permit of the first applicant creates unfair competition and therefore hampers innovation.
- Innovation is high on the agenda in Europe
- Alternatives
 - Acquire studies from another company
 - Government funded studies

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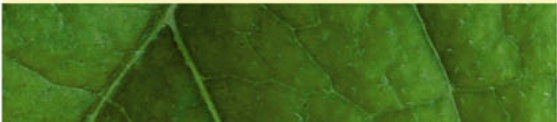
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Thank you

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Conditions for successful product

1. Does it **work**?
2. Can it be produced **economically**?
3. Is it allowed? Is it **safe**?

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