

Koppert Biological Systems



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Project manager China

Presentation of today

1. Introduction Koppert Biological Systems
2. Challenges in China



Food and farmer safety as a
business model

Koppert's history and milestones

1967



Founder Jan Koppert
cucumber grower



Introduction first
beneficial:
Phytoseiulus persimilis
against spider mite

1972



Introduction *Encarsia formosa* against whitefly

1988



Start production and sales

2005



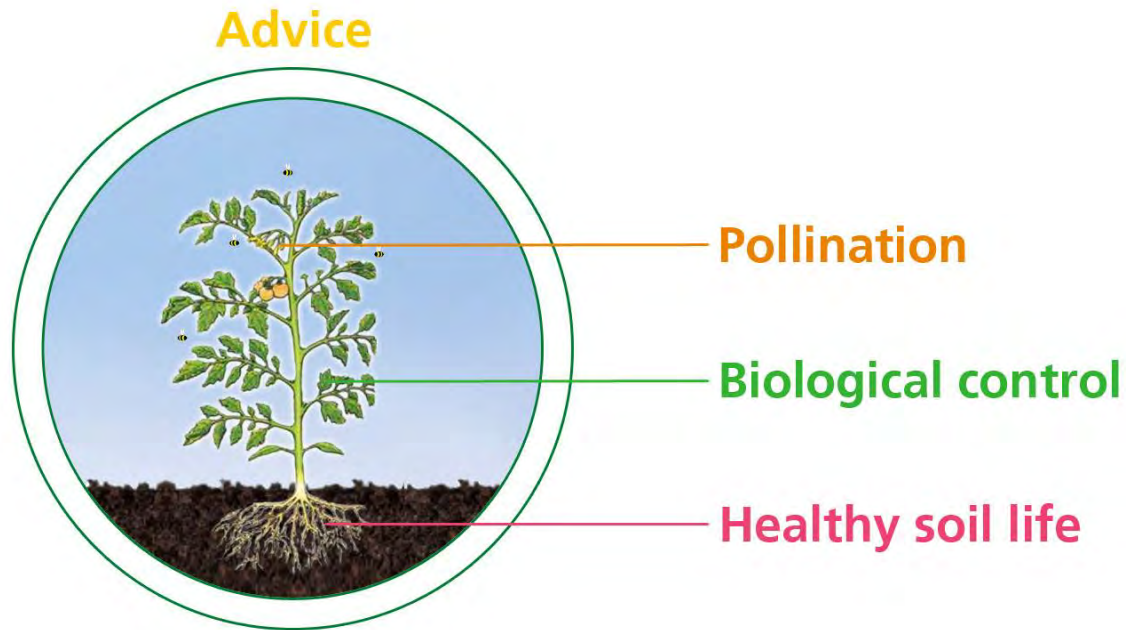
Breakthrough in ornamentals

2010



First phase new Head Office and
International R&D Centre

What we do: Koppert core business



- Biological agents: Biological crop protection
- Bumble bees: Natural pollination
- Microbials: Biological crop protection
- Natugro: Restore the health of the soil

Koppert's mission

To help farmers to be an attractive partner for their customers with focus on maximizing:

1. *Productivity*
2. *Quality*
3. *Food safety*
4. *Sustainability*

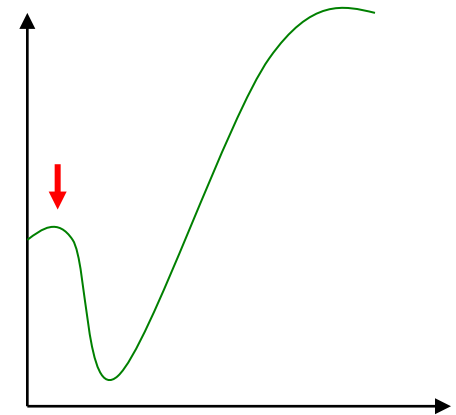


Agricultural challenges in China

- Limited water and arable land
- Retailers need better shelf life
- Consumers are demanding safe food for their children and improved (cosmetic) quality
- Farmers are using a greater range of pesticides
- Pressure on farmers to intensify their farming

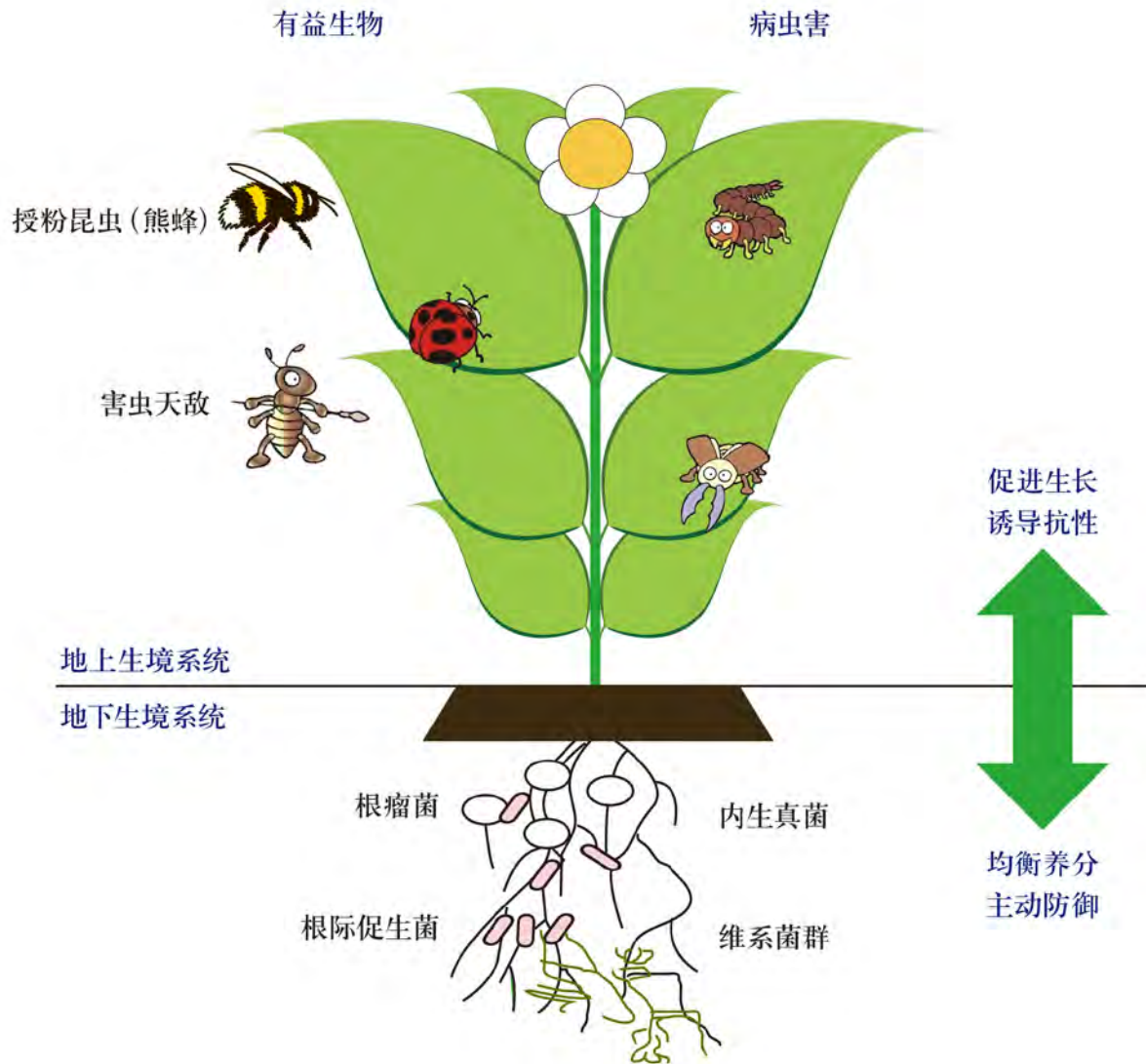
The vicious spiral of chemical pesticides

- Agronomic problems
 - **Resistance**
 - Elimination of natural enemies
- Leads to
 - Increasing application frequency
 - Increasing dose rates
 - Use of illegal pesticides
- Leads to
 - More pest problems
 - Increasing residue levels
- Leads to
 - Increasing environmental impact
 - Decreasing Food Safety



- 1. Agronomic problem**
- 2. Environmental problem**
- 3. Food Safety problem**

Koppert System Approach



What is in our mind

We face several issues on import because of lack of knowledge

- High tech knowlegde is concentrated at companies
- Chinese regulators prefer goverment-government
- How to ensure that innovations for sustainable development are not blocked by regulations based on old practices?

The biggest part of growers is low scale farming, but there is a must for traceability.

Thank you!

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What is in it for China

- Increased yield per m² -> more profit for the grower
- Higher value products:
 - Fresh products with a longer shelf life
 - More vitamins and nutrients
 - Cleaner (free of chemical residue)
- Reduced use of chemical fertilizers and chemical pesticides
- Reduced use of scarce water
- Less polluted soils and waters
- Safer place for farmers to work