



Federal Ministry
of Food, Agriculture and
Consumer Protection

European diversity – hurdle or driver for innovation

Case example: German Innovation Partnerships



Aim of BMELV

- Giving impulse for the development of solutions for the societal challenges
- Strengthening the business location Germany in the field of Agriculture
- Implementation of research into practice.

Innovation program of BMELV

- Launch in 2006
- Implemented by Federal Office for Agriculture and Food, BLE
- Budget: 37 Mio. Euro/Year
- Currently 318 projects funded (finished & running)
- Based on topic related Calls, e.g.: „Improvement of animal husbandry“

Current situation in Germany

Study on the Innovation system in German agriculture on behalf of BMELV in 2012 (Humboldt-University Berlin et al.)

Results:

- Lack of capital between research project and market introduction
- Too short funding period
- Lack of opportunities for testing and demonstration under field conditions
- Lack of networking and cooperation between universities, industry and **farmers**

Consequence:

- Launch of „German Innovation Partnership“ (DIP)

Funding Steps

- 1st Step: Program on Innovation in Agriculture
 - research and development
- 2nd Step: German Innovation Partnership (DIP)
 - experimental development
- 3rd Step: Demonstration projects
 - bridging to practice

Project example:

Development of a rain sensor for kinetic energy and water wetness to improve scab prognosis in apple cultivation in the region of Rhein-Neckar

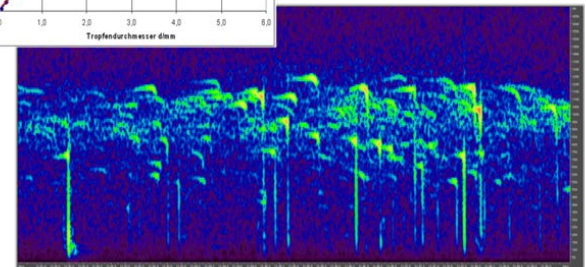
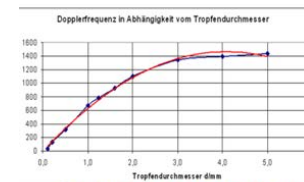
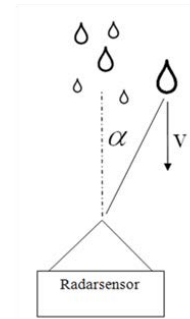
- Scab is a fungal disease with a high impact on apple production.
- Control of scab causes high demand of fungicides.
- Dispersion is caused by rain (not dew): the kinetic energy of rain drops leads to dispersion of spores.



Aim of the project

- Development of a sensor to measure the kinetic energy of rain drops in order to create prognosis models.
- Enabling a selective application of fungicides
- Saving fungicides

Radartechnik



Durch den Radarsensor gemessene Regentropfen als Spektrogramm

Funding process – 1st step

2008 – 2013 Project funded by Innovation Program of BMELV

Project partner:

- Adolf Thies GmbH, Small Medium Enterprise for Sensortechnique
- Julius Kühn Institute, Institute for Plant Protection in Fruit Crops and Viticulture

Project costs:

- 440.000 € Funded by Innovationprogram
- 220.000 € own funding of Adolf Thies GmbH

Results:

- The idea is working
- First sensor prototypes show promising results

Funding process – 2nd step

- Funding by German Innovation Partnership (DIP)
- Aim is the development of a prototype of the entire system: sensor and fitting algorithms and programmes in cooperation between company and researchers
- The financial gap between research project and market introduction can (nearly) be closed.
- “Community Framework for state aid for research and development and innovation” of EU inhibits the funding of market introduction

Funding process – 3rd step

A possible future step is a demonstration project to show the prototype in practice

- It helps the company to make experience in practice
- It helps farmers to make a purchase decision
- It supports the market introduction

European diversity – hurdle or driver for innovation?

- The challenge is
 - to connect diversity
 - to generate profit of diversity
- With the instrument of **European** Innovation Partnership small project groups with specific topics can be connected and profit of each other.
- With these kind of instruments diversity of the EU agricultural research can be a driver for European Innovation