

Scientific Societies and Agro-Food Innovation

Las Sociedades Científicas y la Innovación Agroalimentaria

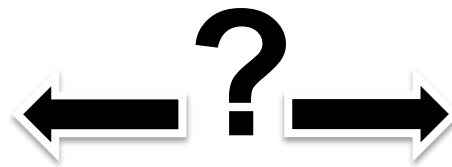
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Research

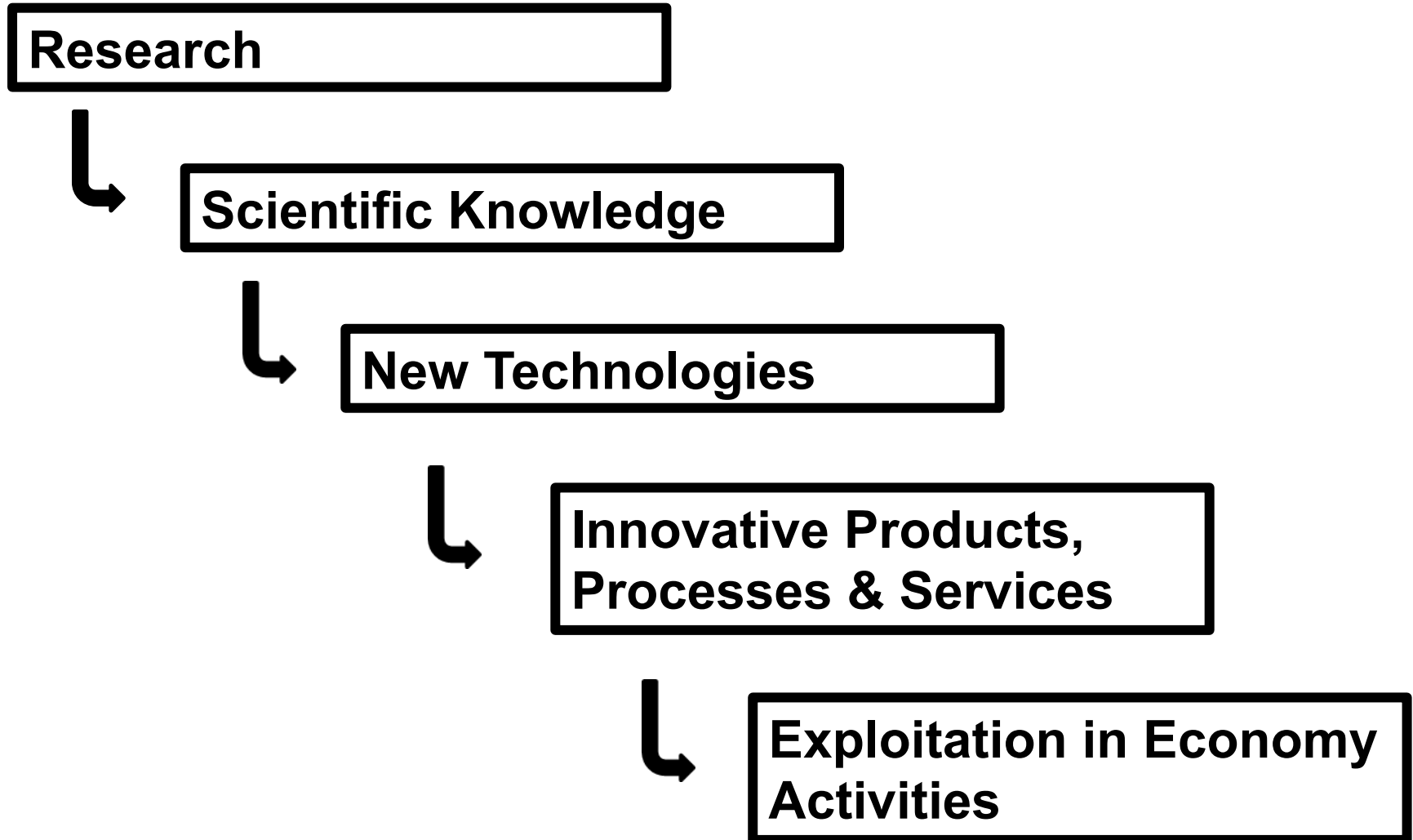
Academia



Innovation

Industry

The Linear Model



The Open Innovation Model

Market
Opportunities

Technological
Capabilities

BUSINESS

Learning
Processes

**External
Knowledge**

Problem-solving
capability

The Most Important Knowledge Transfer Mechanisms

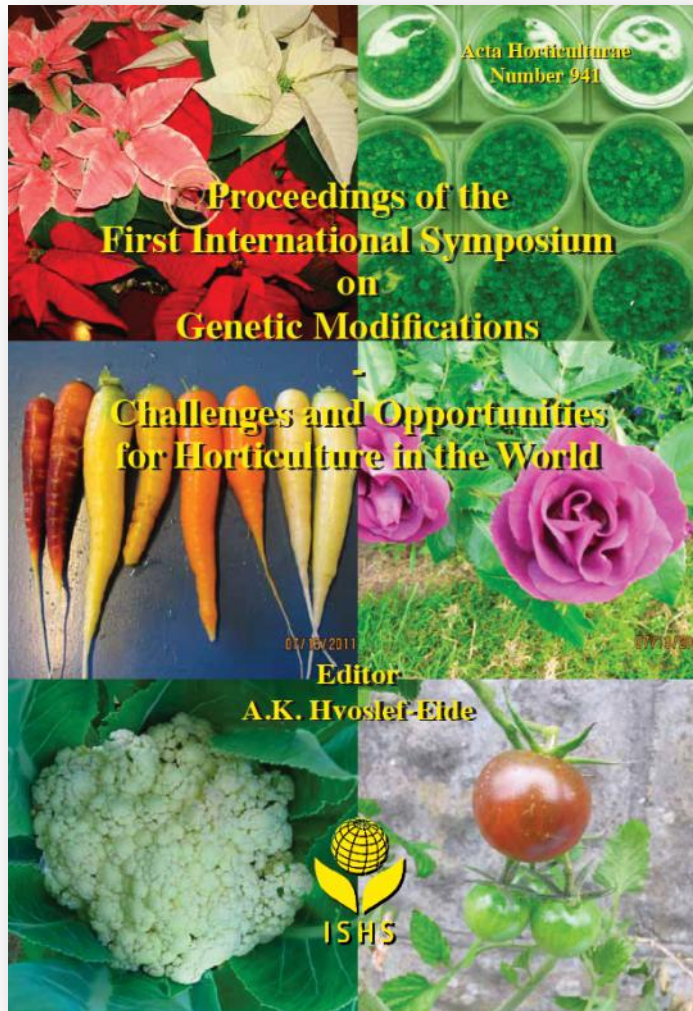
- 1. The traditional published academic outputs such as journal articles**
 - 2. Informal interactions e.g. conferences, seminars, professional associations as well as personal contacts**
 - 3. More in depth research relationships – including contract research, consultancy, collaborative R&D and accessing research skills**
 - 4. Exploiting intellectual property through licencing patents**
-

Source: EP-STOA, 2012

International Society for Horticultural Science:

- **Specialized symposia**
- ***Acta Horticulturae***
(symposium proceedings)





- 50 symposia per year
- All symposia published in **Acta Horticulturae®**
- All Acta (>970) posted at **www.actahort.org**
- >54.000 full text articles
- >20.000 page views per day!





Knowledge Transfer Mechanisms

1. The traditional published academic outputs such as journal articles

2. Informal interactions e.g. conferences, seminars, professional associations as well as personal contacts

What is the contribution of scientific literature to innovation?



Internal transcribed spacer 2 amplicon as a molecular marker for identification of *Peronospora parasitica* (crucifer downy mildew)

S. Casimiro^{1,2}, M. Moura^{1,2}, L. Zé-Zé², R. Tenreiro² and A.A. Monteiro¹

¹Instituto Superior de Agronomia, Universidade Técnica de Lisboa, Tapada da Ajuda, Lisboa, Portugal, and ²Departamento de Biologia Vegetal and Centro de Genética e Biologia Molecular, Faculdade de Ciências da Universidade de Lisboa, Campo Grande, Lisboa, Portugal

2002/0250; received 23 June 2003, revised 20 July 2003 and accepted 25 November 2003

Quick test to detect the presence of the pathogen in the absence of reproductive structures

Research



Innovation

Article-Level Metrics

Usage

PLOS: views
PDF downloads
XML downloads
PMC: views
PDF downloads

Citations

PubMed Central
CrossRef
Scopus
Web of Science

PLOS

Comments
Notes
Ratings

Social Network

CiteULike
Mendeley
Twitter
Facebook

Blogs & Media

Nature Blogs
ScienceSeeker
Research Blogging
Wikipedia
Trackbacks

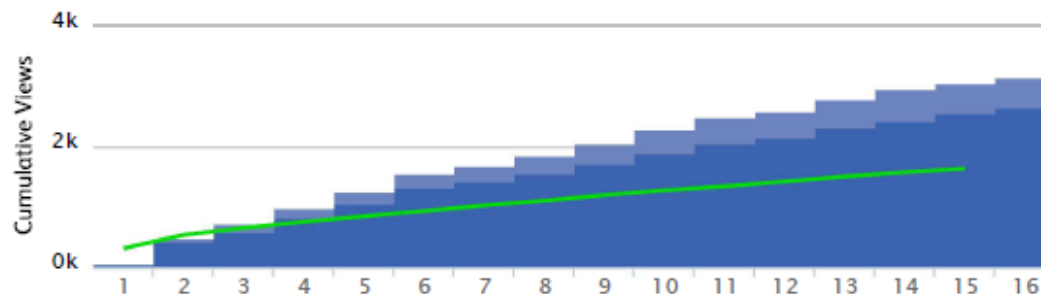
Induction of Drought Tolerance in Cucumber Plants by a Consortium of Three Plant Growth-Promoting Rhizobacterium Strains

Chun-Juan Wang, Wei Yang, Chao Wang, Chun Gu, Dong-Dong Niu, Hong-Xia Liu, Yun-Peng Wang, Jian-Hua Guo

Published: December 28, 2012 • DOI: 10.1371/journal.pone.0052565

Viewed

Total Article Views 3,142 <small>Dec 28, 2012 (publication date) through Mar 31, 2014*</small>		HTML Page Views	PDF Downloads	XML Downloads	Totals
	PLOS	2,114	510	13	2,637
	PMC	380	125	n.a.	505
	Totals	2,494	635	13	3,142
	25.46% of article views led to PDF downloads				





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Technology Readiness Levels

PRO (University):

1. **Basic research**

2. **Applied research**

3. Proof of concept validation

4. Standalone prototyping
implementation and test

5. Local prototyping test

6. Full-scale prototyping

7. Prototyping demonstration

8. Verification and validation

9. Successful operational
experience

Company:

1. Basic research

2. Applied research

3. Proof of concept validation

4. Standalone prototyping
implementation and test

5. Local prototyping test

6. Full-scale prototyping

7. Prototyping demonstration

8. Verification and validation

9. **Successful operational
experience**

Knowledge Transfer Interactions are changing:

- **The level interaction is occurring is rising due to the higher scientific qualification of industry players;**
 - **Research in Academia tends to be less applied due to bibliometric pressure and funding agencies criteria.**
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Which can be the role of scientific societies in the promotion of informal interactions for agro-food knowledge transfer?

The ISHS Symposia as an interface between disciplinary science and the industry

Science 1

Industry 1

Science 2

**ISHS Symposium on a
Specific Horticultural Topic
e.g. TOMATO**

Industry 2

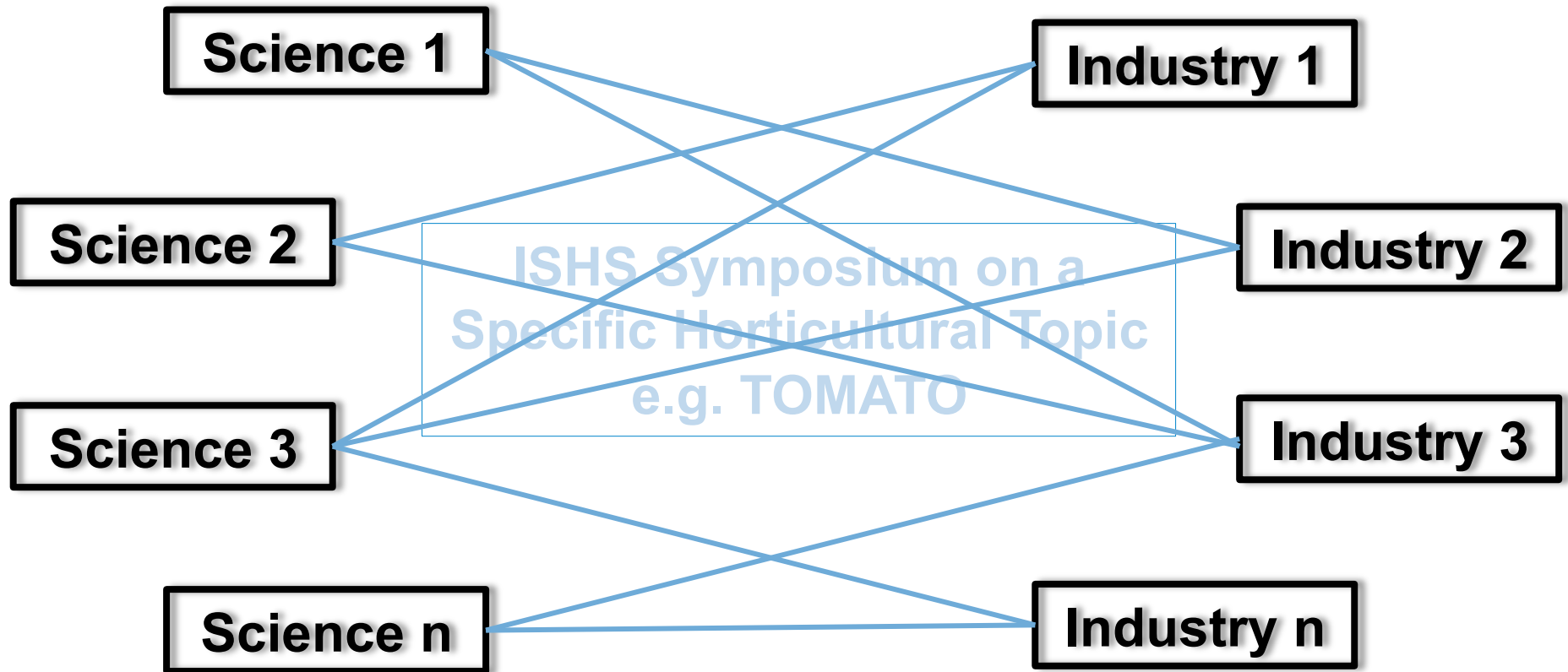
Science 3

Industry 3

Science n

Industry n

The ISHS Symposia as an interface between disciplinary science and the industry



Final remarks:

- Publications have already a great impact on agro-food innovation but open-access will blow-up that impact;
 - Scientific meetings can only contribute to innovation if they are well attended by industry players;
 - How is the role of the scientific societies going to adjust to the change from an innovation paradigm of knowledge transfer to a paradigm of knowledge exchange?
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Universidade de Lisboa

*Hinc
Patriam
Sustinet*



Muchas Gracias