

The use and exchange of biological control agents worldwide

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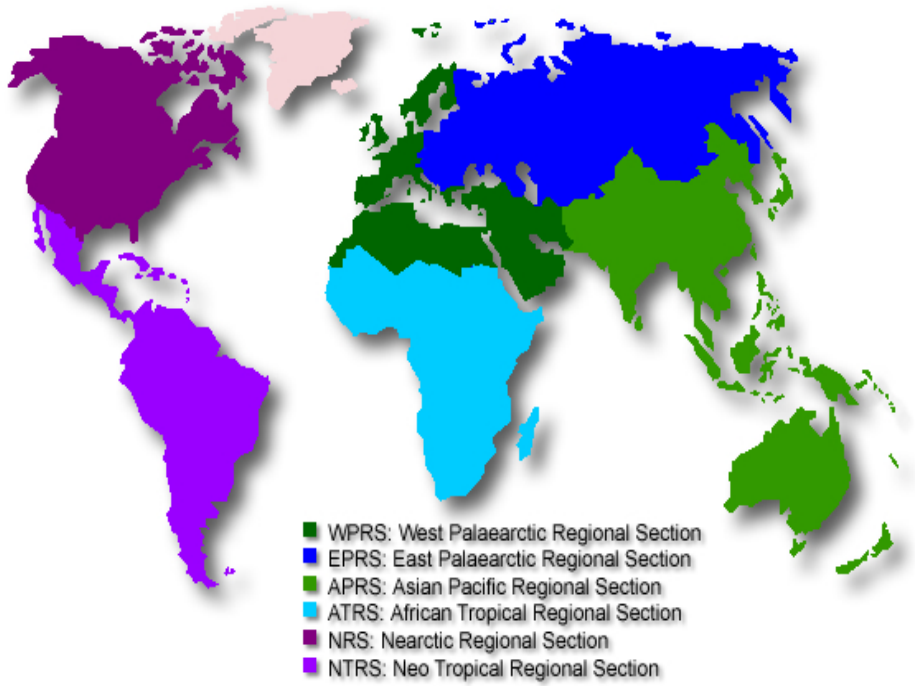


Mission: to promote of the development of biological control and its application in integrated pest control

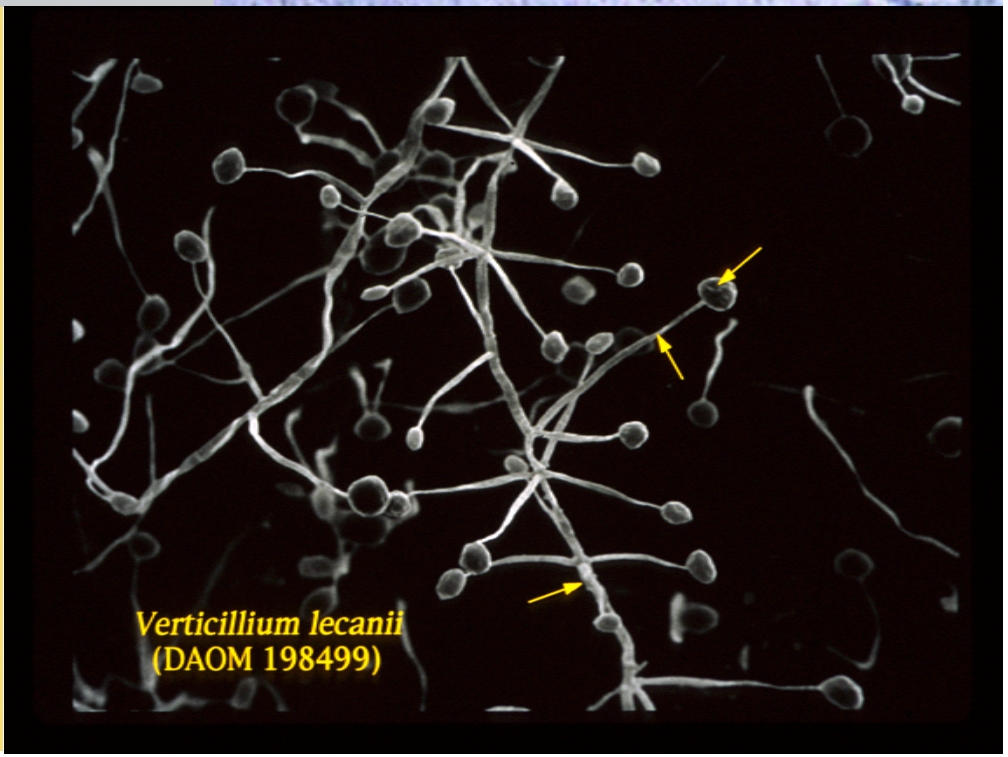
International Organisation for Biological Control - IOBC

In 2008, IOBC established a Commission on BC and ABS

Provide **scientific advice** to oversee the design and implementation of an ABS regime that ensures **practical and effective managements** for the collection and use of BC agents which are **acceptable to all parties**.

Biological control

The use of living organisms, or products derived from living organisms, such as toxines, for pest control


Verticillium lecanii
(DAOM 198499)

Biological Control: A successful approach

Biological control is considered to be the best alternative to pesticides

Biological control is efficient and safe for humans and the environment

There is mainly two types of biological approaches:

- **Classical Biological Control**
- **Augmentative Biological Control**

Classical biological control:
the use of exotic natural enemies to control exotic pests

- **> 5,000 introductions of 2,000 exotic species in 196 countries or islands**

- **When CBC works, it works forever**

Rodolia **coccinellids to control** ***insect scales*** **worldwide for more than 100 years**

Augmentative biological control:

the release of mass produced natural enemies (native or exotic) to control pest

- **> 170 species of biocontrol agents available for ABC**

Who are the implementers of biological control?

Classical BC: National or international agencies

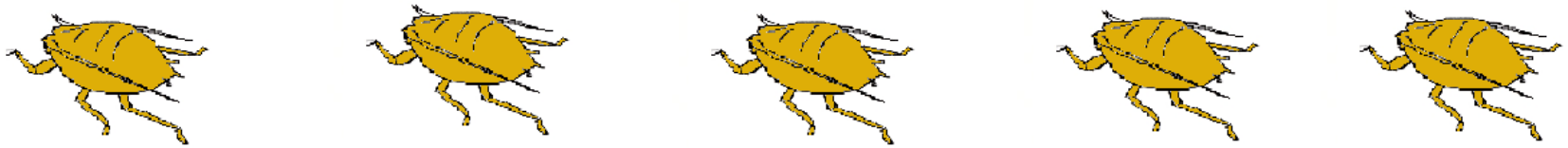
Augmentative BC: National agencies and

BC industry

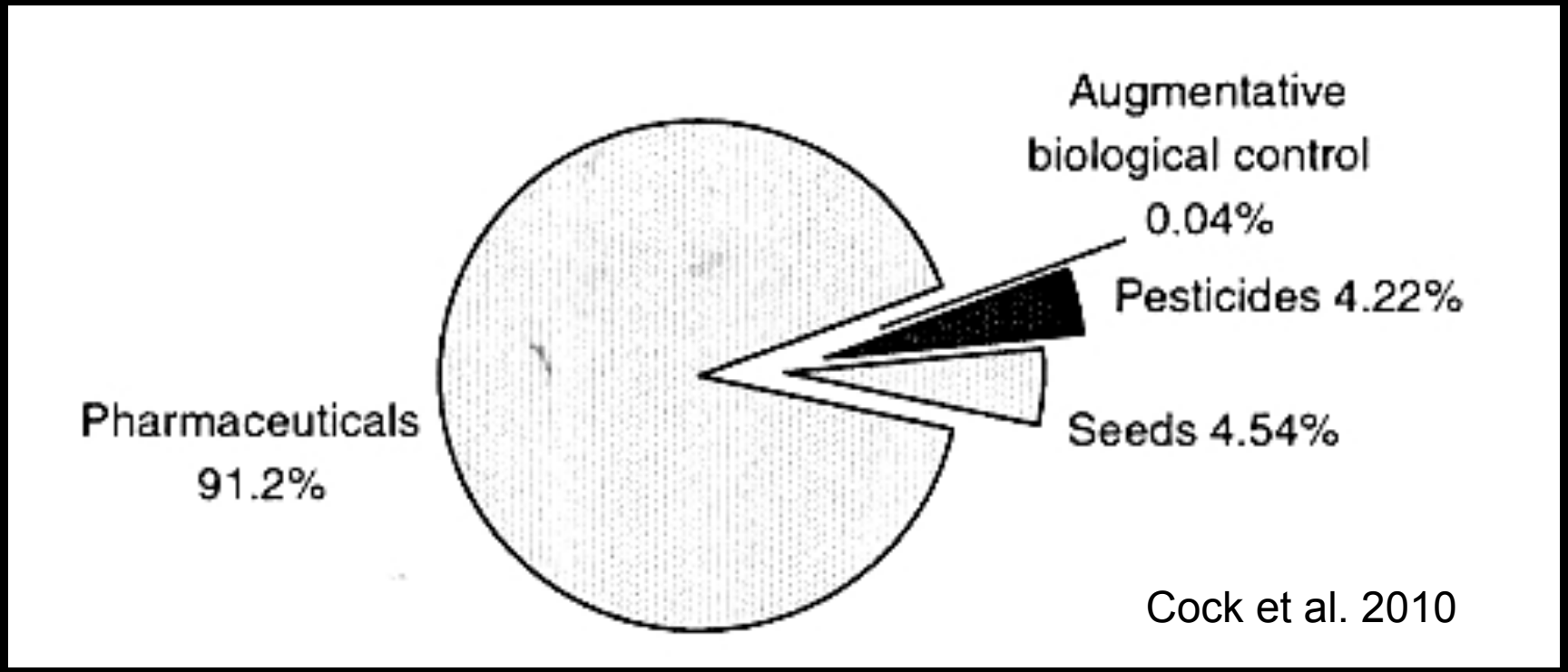
The Biological Control Industry

- **Relatively small industry worldwide**
  - 30 medium-size producers
  - 100 small companies (< 5 employees)
  - Mostly in developed and emergent countries

- **Total market in 2008 of 220 million $$$**
  - Average profit margin: 3-4%



Relative market value of selected biodiversity-related sectors



Augmentative BC is a small activity undertaken by small sized enterprises and with modest profits

A new geo-political issue…

We are facing increasing problems with access to natural enemies for Biological Control since the ***Convention on Biological Diversity (CBD)*** and its **Access and Benefit Sharing (*ABS*) *regime***.

10-15 years ago, biological control people were living in simple times !

The concerns…

The BC sector has expressed concerns about the risk that new international ABS legislation will add another level of regulation, which is likely to slow and even stop the process of BC

ABS regulations should recognise the specific features of BC:

Countries providing BCAs are also users of this technology;

Many BCAs are exchanged, but have little recoverable monetary value;

BC agents are living organisms, they cannot be patented. Once released and established in a country, they belong to the public domain;

ABS regulations should recognise the specific features of BC:

Since the early days of BC, there has been a community of practice based on FREE MULTILATERAL EXCHANGE of BC agents;

All knowledge is put into the public domain;

Biocontrol agents are public goods

Who benefit from biological control?

- **Farmers**

- **Society**
  - Improved food security
  - Improved livelihoods
  - Reduced contamination from pesticides

- **Environment**
  - Reduced contamination from pesticides
  - Increased biodiversity
  - Better control of invasive alien species

What are the opportunities for benefit sharing ?

- **Shared research activities**

  From preliminary surveys to detailed studies on potential biocontrol agents

- **Capacity building**

- **Technology transfer**

The industry considers benefit sharing in the form of: …

- **Knowledge sharing**
- **Training**
- **Provisions of BC agents**
- **Other ways to be defined…**

In view of the specific and positive features of BC, IOBC recommends that:

Governments should build on the existing multilateral practice of exchange of natural enemies for BC on a complementary and reinforcing basis, which ensures fair sharing of the benefits of BC worldwide;

ABS in relation to BC should be based on non-monetary benefit sharing, as already practised by most organisations and the industry.

To conclude

Biological control agents are genetic resources for food and agriculture

- They provide societal benefits for all, such as environmental and public health benefits;
- They mostly generates significant non-monetary benefits;
- Biological control is a true and successful model of multilateral appoach worlwide;

Publications prepared by the IOBC Commission on BC and ABS

- Cock, M.J.W., et al. 2009. The use and exchange of biological control agents for food and agriculture. Commission on genetic resources afor food and agriculture. Food and Agriculture Organization of the United Nations. Pp. 1-95.

- Cock, M.J.W., et al. 2010. Do new access and benefit sharing procedures under the Convention on Biological Diversity threaten the future of biologival control ? *Biocontrol* (in press)

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A final remark to the distinguished delegates of this CBD meeting

Biological control deserves a special attention within the upcoming ABS regime

And a wish…

Please come up with a fair and simple ABS regime !