

# Improving lives with knowledge

**At CABI, we know the most effective way of addressing important agricultural and environmental issues, and improving people's lives, is to facilitate sharing of scientific information and knowledge. In working to achieve this, we have been at the forefront of scientific publishing for over 100 years, consistently reinvesting our publishing surpluses into development projects.**

Our work in publishing very much reinforces our international development goals and projects. In 2013, CABI joined a number of initiatives to share knowledge, including **Global Open Data for Agriculture and Nutrition (GODAN)**, which supports efforts to make agricultural and nutritionally relevant data available, accessible and usable worldwide.

We also announced a strategic collaboration with the **Regional Universities Forum for Capacity Building in Agriculture (RUFORUM)**, giving 32 African universities free access to **CAB Abstracts**, **CABI Compendia** and **CAB eBooks**.

Our publishing products and work in knowledge management enable all kinds of people working in agriculture and the environment to make informed decisions – from farmers and extension workers needing practical soil health information, to researchers and decision makers needing data to form policies to address some of the world's biggest challenges like climate change and food security.

Policy makers, researchers and workers in many organizations across the world benefit from CABI's science publishing and knowledge management and, in 2013, we continued to build on these resources to help people reach well-informed decisions and positively impact people's lives.

## CABI's work supports US policy decision making on invasive species

In 2013, CABI worked with the United States Department of Agriculture (USDA), using our scientific expertise and evidence-based approaches to research, to help prove their focus on tackling invasive species in the US is scientifically justified.

The USDA wanted to understand how it could prevent invasive species negatively impacting endangered, threatened or 'candidate' (i.e. potentially endangered or threatened) species in the most cost effective manner. However, the evidence underpinning the impact was fragmented. While certain documents, like the COP10 statement of the Convention on Biological Diversity, state that invasive species are the second greatest cause of species extinction, the information supporting this statement was incomplete.

The USDA recognized that to be cost-effective, management of invasive species must be supported by the best available science. The department asked CABI – with world-class expertise in analyzing scientific data – to undertake a systematic review and determine whether the COP10 statement agrees with the available information. **"Systematic reviews** are quickly becoming the gold-standard method for evidence-based policy," says Holly Wright, Systematic Reviewer at CABI. More rigorous than conventional literature reviews, systematic reviews involve an exhaustive and unbiased search of all available literature, including peer-reviewed articles and papers.

In 2013, a team of CABI scientists considered data supporting or contesting the impact of invasive species on the decline or extinction of endangered, threatened or candidate species in the US. They discovered that the

vast majority of the information they reviewed showed the impact to be negative.

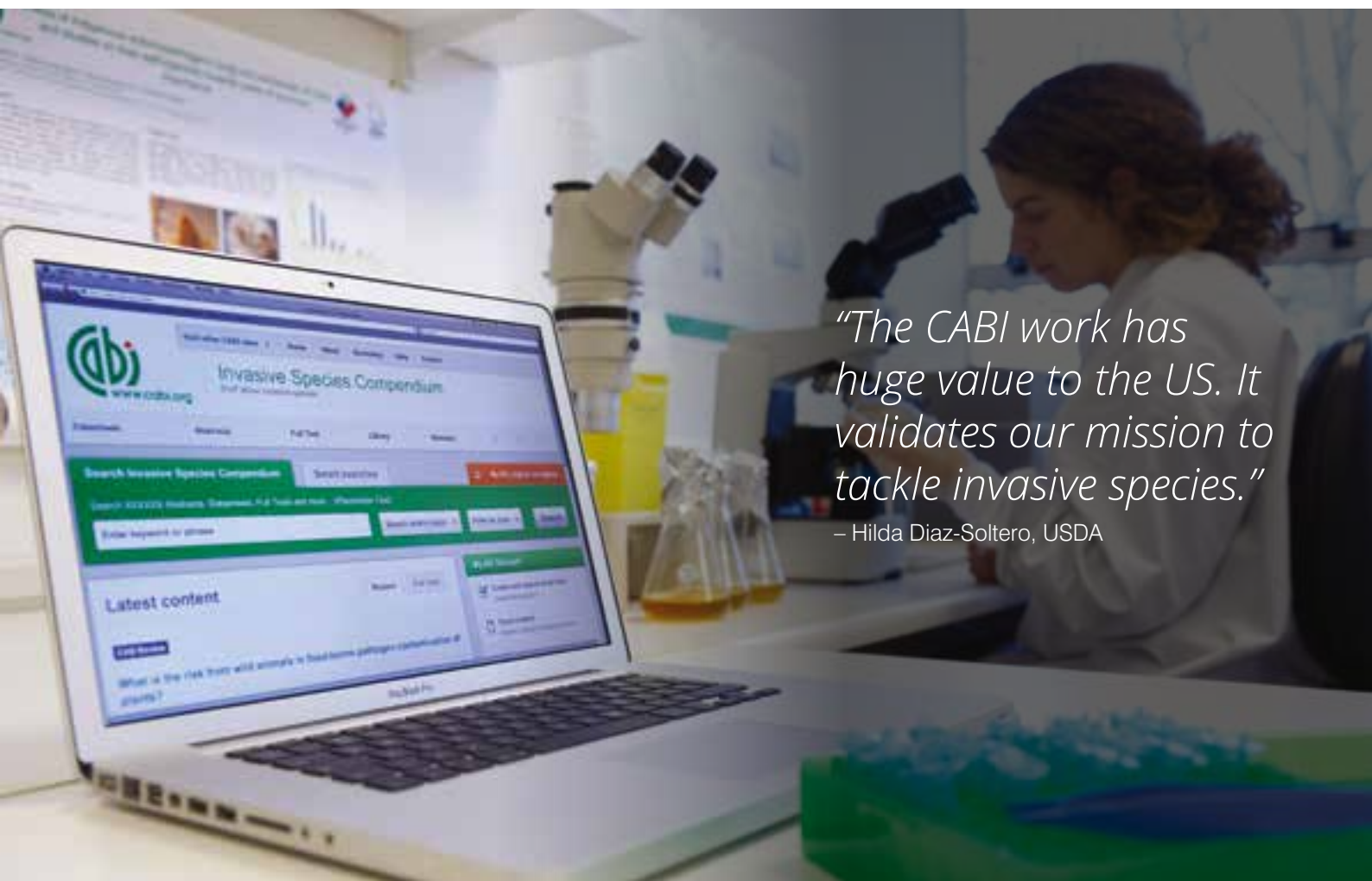
For USDA, the CABI review justifies its efforts to control invasive species in the US. Specifically, it provides an evidence base for the department's programme, Invasives Causing Extinction.

"The CABI work has huge value to the US. It validates our mission to tackle invasive species, and it helps us make a strong case for prioritizing the fight against invasives in agency programmes and budgets," says Hilda Diaz-Soltero, USDA Senior Invasive Species Coordinator representing the Secretary of Agriculture at the National Invasive Species Council in the US.

CABI also curates and manages the **Invasive Species Compendium (ISC)**. This free resource – a comprehensive database of up-to-date datasheets, records and information on invasive species – helps people working in invasive species management with

their research, education and decision making. Joan Steer, Plant Protection Officer at the Department of Agriculture (DoA), Cayman Islands, comments on how she and her colleagues have embraced the ISC in their day-to-day work:

*"The Agricultural Health Inspection Services staff members use the ISC regularly as a tool to aid the decision making process especially with regards to the importation of live plants. The importers' list of plants is checked against the Invasive Species (IS) list in the Compendium. When IS are identified on an importer's list, the Inspectors bring such species to the attention of both the Department of Agriculture's Plant Protection Unit and the Department of the Environment for review before a final decision is made to grant permission or deny entry of the species into the Cayman Islands."*



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– Hilda Diaz-Soltero, USDA

# CABI databases recommended for use in human and animal health reviews

**CABI's Global Health database** is a recognized resource for helping policy makers reach evidence-based decisions worldwide. Our public health database has been used in over 100 systematic reviews, including those used by the World Health Organization to deliver global health policy guidelines.

An increasing number of organizations are adopting and endorsing **CAB Abstracts**, CABI's bibliographic information service for applied life sciences literature, for developing processes in veterinary medicine.

In 2013, researchers from the Centre for Evidence-based Veterinary Medicine at the University of Nottingham studied the coverage of veterinary literature by the major bibliographic databases. They recommended CAB Abstracts as the most comprehensive resource for supporting an evidence-based approach to animal health; CAB Abstracts covers 90.2% of all global journals with veterinary content.

The full results of the study were published in the *Journal of Veterinary Medical Education* (39(4):404-412), with the authors concluding:

*"For a veterinary practitioner to be able to make clinical decisions based on the best available evidence, as required by the evidence-based approach, the authors indicate that they should be including CAB Abstracts in literature searching or they are likely to miss crucially important evidence."*

The need for an evidence-based approach is central to veterinary science, with those working in the field needing the best possible information to make decisions on animal health. The Veterinary Emergency and Critical Care Society also recently recognized CAB Abstracts as the leading veterinary database for the science of resuscitation of domestic animals.

# CABI records make crop pest climate change study possible

In 2013, researchers at the Universities of Exeter and Oxford used data from **CABI's historical records** to demonstrate that global warming is resulting in the spread of crop pests towards the North and South Poles at a rate of nearly three kilometres per year.

The research team used the CABI Distribution Maps of Plant Pests and of Plant Diseases to track crop pests and diseases around the world using data from 1822 to the present day, and demonstrated the strong relationship between increased global temperatures over the past 50 years and expansion in the range of crop pests.

They detailed their findings in a study published in the science journal, *Nature Climate Change* (3:985-988), suggesting that this spread will continue to increase if global temperatures rise as predicted.

CABI plays a key role in collecting data that is vital to understanding the spread of crop pests. This includes leading the Plantwise programme which, through plant clinics and a freely accessible knowledge bank, assists developing countries in collecting and analyzing local plant pest records.

As these records grow, pest reporting and forecasting will become even more detailed and useful. Dr Dan Bebbler from Exeter University says CABI's role was crucial to his research: "Without CABI data, we wouldn't have been able to do our work."

**6,690,000 UNIQUE VISITS TO CABI DATABASES, WITH MOBILE USAGE UP MORE THAN 100% FROM 2012**

**366,584 NEW ABSTRACTS ADDED TO CAB ABSTRACTS**

**41,530 FULL TEXT ARTICLES ADDED TO CAB ABSTRACTS**

**176,007 NEW ABSTRACTS ADDED TO GLOBAL HEALTH**

**10,231 FULL TEXT ARTICLES ADDED TO GLOBAL HEALTH**

**INFOTREE LAUNCHED**

**57 NEW BOOKS PUBLISHED**

**124 BOOKS RE-PRINTED**

**136 CABI BOOKS AVAILABLE AS KINDLE EDITIONS**