Development of a new diagnostic tool using DNA barcoding to identify quarantine organisms in support of plant health

Fact Sheet

Project Information

QBOL
Grant agreement ID: 226482
Status
Closed project
Start date
21 March 2009
End date
20 September 2012

Funded under
FP7-KBBE
Overall budget
€ 4 142 713,73
EU contribution
€ 2 991 433

Coordinated by
STICHTING WAGENINGEN RESEARCH
Netherlands

Objective

Development of accurate identification tools for plant pathogens and pests is vital to support European Plant Health Policies. For this project Council Directive 2000/29/EC is important, listing some 275 organisms for which protective measures against introduction into and their spread within the Community needs to be taken. Those threats are now greater than ever because of the increases in the volumes, commodity types and origins of trade, the introduction of new crops, the continued expansion of the EU and the impact of climate change. Currently identifying pathogens (in particular new emerging diseases) requires a staff with specialised skills in all disciplines (mycology, bacteriology, etc.); which is only possible within big centralised laboratory facilities. Taxonomy, phytopathology and other fields which are vital for sustaining sound public policy on phytosanitary issues are threatened with
extinction. Modern molecular identification/detection techniques may tackle the decline in skills since they often require much less specialist skills to perform, are more amenable for routine purposes and can be used for a whole range of different target organisms. Recently DNA barcoding has arisen as a robust and standardised approach to species identification. QBOL wants now to make DNA barcoding available for plant health diagnostics and to focus on strengthening the link between traditional and molecular taxonomy as a sustainable diagnostic resource. Within QBOL collections harbouring plantpathogenic Q-organisms will be made available. Informative genes from selected species on the EU Directive and EPPO lists will be DNA barcoded from vouchered specimens. The sequences, together with taxonomic features, will be included in a new internet-based database system. A validation procedure on developed protocols and the database will be undertaken across worldwide partners to ensure robustness of procedures for use in a distributed network of laboratories across Europe.

Field of science

/social sciences/economics and business/business and management/commerce
/natural sciences/biological sciences/microbiology/bacteriology
/natural sciences/biological sciences/microbiology/mycology
/social sciences/political science/public policy
/agricultural sciences/agriculture, forestry, and fisheries/agriculture/plant breeding/crops

Programme(s)

Topic(s)

Call for proposal

FP7-KBBE-2008-2B

Funding Scheme

CP-FP - Small or medium-scale focused research project

Coordinator

STICHTING WAGENINGEN RESEARCH

Address

Droevendaalsesteeg 4

Activity type

Research Organisations

EU contribution

€ 564 916
Participants (20)

Food and Environment Research Agency

**United Kingdom**
EU contribution
€ 390 000

Address
**Area 1A, Nobel House, Smith Square 17 SW1P 3JR London**

Activity type
Private for-profit entities (excluding Higher or Secondary Education Establishments)

Website
Contact the organisation

Administrative Contact
Peter Bonants (Dr.)

VLAAMSE GEWEST

**Belgium**
EU contribution
€ 210 000

Address
**Avenue Du Port 88 1000 Brussel**

Activity type
Public bodies (excluding Research Organisations and Secondary or Higher Education Establishments)

Contact the organisation

Administrative Contact
Erik Van Bockstaele (Prof.)

UNIVERSITEIT GENT

**Belgium**
EU contribution
€ 210 800
<table>
<thead>
<tr>
<th>Address</th>
<th>Activity type</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sint Pietersnieuwstraat 25</td>
<td>Higher or Secondary Education Establishments</td>
</tr>
<tr>
<td>9000 Gent</td>
<td></td>
</tr>
<tr>
<td><a href="#">Website</a></td>
<td><a href="#">Contact the organisation</a></td>
</tr>
</tbody>
</table>

Administrative Contact
Nathalie Vandepitte (Ms.)

---

**EIDGENOESSISCHES DEPARTEMENT FUER WIRTSCHAFT, BILDUNG UND FORSCHUNG**

- Switzerland
- EU contribution
  - € 345 664

**Address**
- Bundeshaus Ost
- 3003 Bern

**Activity type**
- Public bodies (excluding Research Organisations and Secondary or Higher Education Establishments)

[Contact the organisation](#)

Administrative Contact
Roger Fehr (Mr.)

---

**INSTITUT NATIONAL DE RECHERCHE POUR L'AGRICULTURE, L'ALIMENTATION ET L'ENVIRONNEMENT**

- France
- EU contribution
  - € 340 060

**Address**
- Rue De L'universite 147
- 75338 Paris Cedex 07

**Activity type**
- Research Organisations

[Website](#)
[Contact the organisation](#)

Administrative Contact
Dominique Ottomani (Mr.)

---

**AARHUS UNIVERSITET**

- Denmark
- EU contribution
  - € 170 000
<table>
<thead>
<tr>
<th>Address</th>
<th>Activity type</th>
<th>EU contribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nordre Ringgade 1 8000 Aarhus C</td>
<td>Higher or Secondary Education Establishments</td>
<td></td>
</tr>
<tr>
<td>Website</td>
<td>Contact the organisation</td>
<td></td>
</tr>
<tr>
<td>Administrative Contact</td>
<td>Steen Lykke Nielsen (Mr.)</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>ALMA MATER STUDIORUM - UNIVERSITA DI BOLOGNA</strong></td>
<td></td>
</tr>
<tr>
<td>Italy</td>
<td></td>
<td>€ 169 960</td>
</tr>
<tr>
<td>Address</td>
<td>Activity type</td>
<td></td>
</tr>
<tr>
<td>Via Zamboni 33 40126 Bologna</td>
<td>Higher or Secondary Education Establishments</td>
<td></td>
</tr>
<tr>
<td>Website</td>
<td>Contact the organisation</td>
<td></td>
</tr>
<tr>
<td>Administrative Contact</td>
<td>Torresan Diego (Dr.)</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>KONINKLIJKE NEDERLANDSE AKADEMIE VAN WETENSCHAPPEN - KNAW</strong></td>
<td></td>
</tr>
<tr>
<td>Netherlands</td>
<td></td>
<td>€ 305 000</td>
</tr>
<tr>
<td>Address</td>
<td>Activity type</td>
<td></td>
</tr>
<tr>
<td>Kloveniersburgwal 29 Het Tripenhuis 1011 JV Amsterdam</td>
<td>Other</td>
<td></td>
</tr>
<tr>
<td>Website</td>
<td>Contact the organisation</td>
<td></td>
</tr>
<tr>
<td>Administrative Contact</td>
<td>Don Van Velzen (Mr.)</td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>CENTRO INTERNACIONAL DE LA PAPA</strong></td>
<td></td>
</tr>
<tr>
<td>Peru</td>
<td></td>
<td>€ 110 753</td>
</tr>
<tr>
<td>Address</td>
<td>Activity type</td>
<td></td>
</tr>
<tr>
<td>Avenida La Molina 1895 12 Lima</td>
<td>Public bodies (excluding Research Organisations and Secondary or Higher)</td>
<td></td>
</tr>
</tbody>
</table>
NEDERLANDSE VOEDSEL EN WARENAUTORITEIT

Netherlands
EU contribution
€ 65 075

Address
Catharijnesingel
3511 GG Utrecht

Activity type
Public bodies (excluding Research Organisations and Secondary or Higher Education Establishments)

Website
Contact the organisation

Administrative Contact
Carlos Alonso (Mr.)

NACIONALNI INSTITUT ZA BIOLOGIJO

Slovenia
EU contribution
€ 14 934

Address
Vecna Pot 111
1000 Ljubljana

Activity type
Research Organisations

Website
Contact the organisation

Administrative Contact
Maja Ravnikar (Dr.)

Státní rostlinolékařská správa

Czechia
EU contribution
€ 12 206

Address
State Phytosanitary Administration 23
CZ77900 Olomouc

Activity type
Public bodies (excluding Research Organisations and Secondary or Higher Education Establishments)
MINISTERE DE L AGRICULTURE DE L AGROALIMENTAIRE ET DE LA FORET

France

Address:
Rue De Varenne 78
75700 Paris

Activity type:
Public bodies (excluding Research Organisations and Secondary or Higher Education Establishments)

Administrative Contact:
Katerina Tomankova (Dr.)

CHINESE ACADEMY OF INSPECTION & QUARANTINE

China

EU contribution:
€ 14 400

Address:
North Road Gaobei Dian 3
Chaoyang District
100025 Beijing

Activity type:
Research Organisations

Administrative Contact:
Weimin Li (Dr.)

LINCOLN UNIVERSITY

New Zealand

Address:
Corner Of Springs And Ellesmere Junction Road
8150 Canterbury

Activity type:
Higher or Secondary Education Establishments
<table>
<thead>
<tr>
<th>Administrative Contact</th>
<th>EMPRESA BRASILEIRA DE PESQUISA AGROPECUARIA EMBRAPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Katrina Wilke (Ms.)</td>
<td>Brazil</td>
</tr>
<tr>
<td>EU contribution</td>
<td>€ 12 825</td>
</tr>
<tr>
<td>Address</td>
<td>Prq Estacao Biologica Pqeb</td>
</tr>
<tr>
<td></td>
<td>Edificio Sede Plano Pltoto</td>
</tr>
<tr>
<td></td>
<td>70770901 Brasilia</td>
</tr>
<tr>
<td>Activity type</td>
<td>Private for-profit entities (excluding Higher or Secondary Education Establishments)</td>
</tr>
<tr>
<td>Website</td>
<td>Contact the organisation</td>
</tr>
<tr>
<td>Administrative Contact</td>
<td>Juliana Freitas-Astua (Dr.)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Administrative Contact</th>
<th>UNIVERSITA DEGLI STUDI DI MODENA E REGGIO EMILIA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emilio Stefani (Prof.)</td>
<td>Italy</td>
</tr>
<tr>
<td>EU contribution</td>
<td>€ 13 800</td>
</tr>
<tr>
<td>Address</td>
<td>Via Universita 4</td>
</tr>
<tr>
<td></td>
<td>41121 Modena</td>
</tr>
<tr>
<td>Activity type</td>
<td>Higher or Secondary Education Establishments</td>
</tr>
<tr>
<td>Website</td>
<td>Contact the organisation</td>
</tr>
<tr>
<td>Administrative Contact</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Administrative Contact</th>
<th>INSTITUTO NACIONAL DE INVESTIGACION Y TECNOLOGIA AGRARIA Y ALIMENTARIA OA MP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emilio Stefani (Prof.)</td>
<td>Spain</td>
</tr>
<tr>
<td>EU contribution</td>
<td>€ 14 400</td>
</tr>
<tr>
<td>Address</td>
<td>Carretera De La Coruna</td>
</tr>
<tr>
<td></td>
<td>Km7.5</td>
</tr>
<tr>
<td></td>
<td>28040 Madrid</td>
</tr>
<tr>
<td>Activity type</td>
<td>Research Organisations</td>
</tr>
<tr>
<td>Website</td>
<td>Contact the organisation</td>
</tr>
</tbody>
</table>
STELLENBOSCH UNIVERSITY

South Africa

EU contribution

€ 11 640

Address
Victoria Street Administration
B Building
7600 Stellenbosch

Administrative Contact
Lizel Mostert (Dr.)

AGENCE NATIONALE DE LA SECURITE SANITAIRE DE L ALIMENTATION DE L ENVIRONNEMENT ET DU TRAVAIL

France

EU contribution

€ 15 000

Address
14 Rue Pierre Et Marie Curie
94700 Maisons Alfort

Administrative Contact
Nathalie Franquet (Mrs.)

Last update: 1 August 2019
Record number: 91249

Permalink: https://cordis.europa.eu/project/id/226482/

© European Union, 2020