Demonstration of circular biofertilisers and implementation of optimized fertiliser strategies and value chains in rural communities

Fact Sheet

Project Information

**RUSTICA**
Grant agreement ID: 101000527

**DOI**
10.3030/101000527

<table>
<thead>
<tr>
<th>Start date</th>
<th>End date</th>
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<tr>
<td>1 January 2021</td>
<td>31 December 2024</td>
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**Funded under**
SOCIAL CHALLENGES - Food security, sustainable agriculture and forestry, marine, maritime and inland water research, and the bioeconomy

**Total cost**
€ 8,637,858.75

**EU contribution**
€ 7,672,757.25

**Coordinated by**
KATHOLIEKE UNIVERSITEIT LEUVEN
Belgium

Project description

**Turning food waste into fertiliser**

Studies show that food waste is one of the least recovered materials in a community’s solid waste stream. Unfortunately, food waste that decomposes in landfills creates methane, which contributes to climate change. One solution is to turn this waste into fertiliser. With this in mind, the EU-funded RUSTICA project is
focussing on fruits and vegetables, aiming to develop the technology to convert organic residues from this sector into novel bio-based fertiliser products. The technical solution consists of five conversion processes (carboxylic acid production, microbial biomass production, electrodialysis, insect breeding and biochar production), which can be combined depending on the available waste streams and integrated with state-of-the-art technologies such as composting.

**Fields of science**

- natural sciences > chemical sciences > organic chemistry > organic acids
- engineering and technology > chemical engineering > separation technologies > desalination > electrodialysis
- agricultural sciences > agriculture, forestry, and fisheries > agriculture > horticulture > fruit growing
- agricultural sciences > agriculture, forestry, and fisheries > agriculture > horticulture > vegetable growing
- agricultural sciences > agricultural biotechnology > biomass

**Keywords**

- Fruit and vegetable waste streams
- biofertilizer

**Programme(s)**

- H2020-EU.3.2. - SOCIETAL CHALLENGES - Food security, sustainable agriculture and forestry, marine, maritime and inland water research, and the bioeconomy
- H2020-EU.3.2.1.1. - Increasing production efficiency and coping with climate change, while ensuring sustainability and resilience
- H2020-EU.3.2.4.1. - Fostering the bio-economy for bio-based industries

**Topic(s)**


**Call for proposal**

H2020-RUR-2018-2020
Sub call
H2020-RUR-2020-1

Funding Scheme
IA - Innovation action

Coordinator

KATHOLIEKE UNIVERSITEIT LEUVEN
Net EU contribution
€ 824 000,00

Address
Oude markt 13
3000 Leuven
Belgium

Region
Vlaams Gewest > Prov. Vlaams-Brabant > Arr. Leuven

Activity type
Higher or Secondary Education Establishments

Links
Contact the organisation
Website
Participation in EU R&I programmes
HORIZON collaboration network

Other funding
€ 0,00

Participants (17)

NORMEC OWS
Belgium
CHAMBRE REGIONALE D'AGRICULTURE DES PAYS DE LA LOIRE

France

Net EU contribution
€ 250 625,00

Address
9 rue andre brouard
49105 Angers

Region
Pays de la Loire > Pays de la Loire > Maine-et-Loire

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

Links
Contact the organisation
Participation in EU R&I programmes
HORIZON collaboration network

Other funding
€ 0,00
BIOSABOR SAT
Spain
Net EU contribution
€ 122 150,00
Address
Ctra san jose km 2
04117 San isidro de nijar
Region
Sur > Andalucía > Almería
Activity type
Private for-profit entities (excluding Higher or Secondary Education Establishments)
Links
Contact the organisation
Participation in EU R&I programmes
HORIZON collaboration network
Other funding
€ 52 350,00

CONSIGLIO PER LA RICERCA IN AGRICOLTURA E L'ANALISI DELL'ECONOMIA AGRARIA
Italy
Net EU contribution
€ 679 000,00
Address
Via della navicella 2-4
00184 Roma
Region
Centro (IT) > Lazio > Roma
Activity type
Research Organisations
Links
Contact the organisation
Website
Participation in EU R&I programmes
HORIZON collaboration network
FUNDACION PARA LAS TECNOLOGIAS AUXILIARES DE LA AGRICULTURA
Spain
Net EU contribution
€ 380 675,00
Address
Avda de la innovacion 23 parque tecnologico de almeria el alquian
04131 Almeria
Region
Sur > Andalucia > Almeria
Activity type
Research Organisations
Links
Contact the organisation  Website  Participation in EU R&I programmes  HORIZON collaboration network

AVECOM
Belgium
Net EU contribution
€ 407 109,00
Address
Industrieweg 122p
9032 Gent-wondelgem
SME
Yes
Region
Vlaams Gewest > Prov. Oost-Vlaanderen > Arr. Gent
Activity type
Private for-profit entities (excluding Higher or Secondary Education Establishments)

Links
- Contact the organisation
- Website
- Participation in EU R&I programmes
- HORIZON collaboration network

Other funding
€ 174,476,00

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**ENTOMO CONSULTING SL**

Spain

Net EU contribution
€ 387,598,75

Address
Carretera de murcia 103
30430 Cehegin

SME
Yes

Region
Sur > Región de Murcia > Murcia

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

Links
- Contact the organisation
- Website
- Participation in EU R&I programmes
- HORIZON collaboration network

Other funding
€ 166,113,75

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**PARTICULA GROUP DRUSTVO S OGRANICENOM ODGOVORNOSCU ZA ISTRAZIVANJE RAZVOJ I PROIZVODNJU**

Croatia

Net EU contribution
€ 201,250,00

Address
Tina ujevica 9
51000 Rijeka
SME
Yes
Region
Hrvatska > Jadranska Hrvatska > Primorsko-goranska županija
Activity type
Private for-profit entities (excluding Higher or Secondary Education Establishments)
Links
Contact the organisation
Participation in EU R&I programmes
HORIZON collaboration network
Other funding
€ 86 250,00

WIEDEMANN GMBH
Germany
Net EU contribution
€ 117 661,00
Address
Rieblinger strasse 25
86479 Aichen
SME
Yes
Region
Bayern > Schwaben > Günzburg
Activity type
Private for-profit entities (excluding Higher or Secondary Education Establishments)
Links
Contact the organisation
Participation in EU R&I programmes
HORIZON collaboration network
Other funding
€ 50 426,50
IDCONSORTIUM SL
Spain
Net EU contribution
€ 267 365,00

Address
Calle betis 30
41010 Sevilla

SME
Yes

Region
Sur > Andalucía > Sevilla

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

Links
Contact the organisation Website Participation in EU R&I programmes HORIZON collaboration network

Other funding
€ 114 585,00

STICHTING CROPEYE
Netherlands
Net EU contribution
€ 766 755,00

Address
De geren 4
6659 CX Wamel

SME
Yes

Region
Oost-Nederland > Gelderland > Zuidwest-Gelderland

Activity type
Research Organisations
**EIGEN VERMOGEN VAN HET INSTITUUT VOOR LANDBOUW- EN VISSERIJONDERZOEK**

Belgium

Net EU contribution

€ 770,307,50

Address

Burg. van gansberghelaan 92 bus 1
9820 Merelbeke

Region

Vlaams Gewest > Prov. Oost-Vlaanderen > Arr. Gent

Activity type

Research Organisations

**NEDERLANDSE ORGANISATIE VOOR TOEGEPAST NATUURWETENSCHAPPELIJK ONDERZOEK TNO**

Netherlands

Net EU contribution

€ 537,267,50

Address

Anna van buerenplein 1
2595 DA Den haag
**UNIVERSITEIT GENT**

Belgium

Net EU contribution

€ 677 500,00

Address

Sint pietersnieuwstraat 25
9000 Gent

Region

Vlaams Gewest > Prov. Oost-Vlaanderen > Arr. Gent

Activity type

Higher or Secondary Education Establishments

Links

Contact the organisation  
Website  
Participation in EU R&I programmes  
HORIZON collaboration network

Other funding

€ 0,00

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**CENTRO INTERNACIONAL DE AGRICULTURATROPICAL, CIAT**

Colombia

Net EU contribution

€ 537 643,50

Address
Activity type
Research Organisations

Links
Contact the organisation  Website  Participation in EU R&I programmes  HORIZON collaboration network

Other funding
€ 0,25

DRANCO NV
Belgium
Net EU contribution
€ 627 550,00

Address
Dok noord 4
9000 Gent

SME
Yes

Region
Vlaams Gewest > Prov. Oost-Vlaanderen > Arr. Gent

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

Links
Contact the organisation  Participation in EU R&I programmes  HORIZON collaboration network

Other funding
€ 268 950,00

THIRD-PARTY

NORMEC OWS
Belgium
Net EU contribution
€ 118 300,00

Address
Pantserschipstraat 163
9000 Gent 🏛️

SME 🤔
Yes

Region
Vlaams Gewest > Prov. Oost-Vlaanderen > Arr. Gent

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

Links
Contact the organisation ✆️ Website ✆️
Participation in EU R&I programmes ✆️
HORIZON collaboration network 🌐

Other funding
€ 50 700,00

EC signature date 18 September 2020
Last update: 18 August 2023

Permalink: https://cordis.europa.eu/project/id/101000527

European Union, 2023