Separating eggshell and its membrane to turn eggshell waste into valuable source materials

Fact Sheet

Project information

SHELLBRANE
Grant agreement ID: 286910
Status
Closed project
Start date
1 May 2012
End date
30 April 2014

Funded under:
FP7-SME
Overall budget:
€ 1 566 425,80
EU contribution
€ 1 192 700
Coordination by:
ATEKNEA SOLUTIONS HUNGARY KFT
Hungary

Objective

Agricultural waste management is one of the most emerging problems of food processors. The amount of the generated waste as well as the cost of waste disposal is ever increasing across Europe. Egg processors face the problem of the disposal of eggshell waste.

According to EC regulations, industrial egg-shell is considered as hazardous waste and it is collected by national authorities. This can induce cost of the order of €100,000 per year in case of small or medium sized egg-processors.

However, eggshell is a valuable source material or additive for numerous branches of the industry, such as, among others fodder and fertilizer producers, paper manufacturers. Numerous types of collagens, hyaluronic acid, or amino acids of interest may be extracted from the egg shell membrane and purified for numerous uses (e.g. dietary supplements, cosmetics), which makes the separated eggshell membrane a highly valuable material. This way the egg processors could avoid the cost of waste disposal, moreover they can make extra profit by selling their side product.

The main goal of the project is to develop a method for the industrial-scale separation of avian eggshell and its membrane. This core process will be followed by a post-processing (e.g. drying, freezing, etc.) and packaging mechanism to make the way-to-market easy. This will provide an easy solution to the waste problem of egg processors and putting to the market a valuable raw material for the industry.
Field of Science

/engineering and technology/environmental engineering/waste management
/agricultural sciences/agriculture, forestry, and fisheries/agriculture/plant breeding/crops/fodder
/social sciences/economics and business/business and management/commerce
/natural sciences/chemical sciences/organic chemistry/amines

Programme(s)

FP7-SME - Specific Programme "Capacities": Research for the benefit of SMEs

Topic(s)

SME-2011-1 - Research for SMEs

Call for proposal

FP7-SME-2011

See other projects for this call

Funding Scheme

BSG-SME - Research for SMEs

Coordinator

ATEKNEA SOLUTIONS HUNGARY KFT

Address

Tetenyi Ut 93
1119 Budapest
= Hungary

Activity type

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

EU Contribution

€ 36 360

Website

Contact the organisation

Administrative Contact

Daniel Varga (Mr.)

Participants (7)
<table>
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<tr>
<th>Organisation</th>
<th>EU Contribution</th>
<th>Address</th>
<th>Activity type</th>
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<tr>
<td>ECOMOTIVE ELELMISZERIPARI, KERESKEDELMI ES SZOLGALTATO KFT</td>
<td>€ 278,783</td>
<td>Belterulet 126 8 2943 Babolna</td>
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<td>FRISIAN EGG BV</td>
<td>€ 212,163</td>
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<td>FEDIUK WLADYSLAW</td>
<td>€ 195,937</td>
<td>Ul. Jelenia 2 80 336 Gdansk</td>
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Italy

EU Contribution
€ 28 091

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

Contact the organisation

Administrative Contact
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Last update: 5 September 2016
Record number: 103811