

Eureka Globalstars

Project partners Search Form

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| Contact Person Details | |
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| Organization Details: | | | |
| Name: Decoy | | | |
| Country: Brazil | | Website: https://decoysmart.com/ | |
| Type of Organization: | <input checked="" type="checkbox"/> SME | <input type="checkbox"/> Large Company | <input type="checkbox"/> University |
| | <input type="checkbox"/> Research Inst. | <input type="checkbox"/> Administration | <input type="checkbox"/> Other (specify): |
| Number of Employees: | <input type="checkbox"/> < 10 | <input checked="" type="checkbox"/> 11-50 | <input type="checkbox"/> 51-100 |
| | <input type="checkbox"/> 101-250 | <input type="checkbox"/> > 250 | |

Describe the activities, products, services, and expertise of your organization:

Welcome to Decoy, a pioneering biotech startup dedicated to advancing sustainable solutions for pest control within the animal health sector. Our primary focus lies in the development of innovative biopesticides, leveraging cutting-edge biologic control technology.

At Decoy, we take pride in our groundbreaking achievement: the creation of the world's first biopesticide specifically designed to combat the cattle tick menace. This groundbreaking solution marks a significant milestone in the field of pest management, offering an effective and environmentally friendly alternative to traditional chemical pesticides.

Central to our approach is the utilization of carefully selected species of fungi, natural adversaries of pests yet entirely benign to the welfare of animals. Through rigorous research and development, we have perfected the art of filamentous fungi production, ensuring the highest quality and efficacy of our products.

With a team of seasoned experts at the forefront of filamentous fungi production and product innovation in the realm of animal health, Decoy is poised to revolutionize the way pest control is approached globally. We are committed to forging international partnerships that share our vision of sustainability and environmental stewardship.

Join us in our mission to safeguard animal welfare, promote ecological balance, and pave the way for a greener, more sustainable future.

The information provided here will be used to look for potential partners. All the information provided is public and will be displayed in the matchmaking platform or send to potential partners.

Complete this template and send it back to your national contact point:

- Lieve Apers – VLAIO (Belgium, Flanders) lieve.apers@vlaio.be
- Rodrigo Moraes – FINEP (Brasil) internacional@finep.gov.br
- Klara Musilova – MEYS (Czech Republic) Klara.musilova@msmt.cz
- Rita Silva - ANI (Portugal) rita.silva@ani.pt
- Javier Romero – CDTI (Spain) josejavier.romero@cdti.es
- Arnold Meijer – RVO (The Netherlands) Arnold.meijer@rvo.nl
- Umut Ege – Tübitak (Türkiye) eureka@tubitak.gov.tr

| Project Details | |
|---|--|
| Project Title | SporeCraft: Innovating Fungi Spore Products through Automation |
| Acronym | IFSPA |
| Tech area | Industrial automation engineering |
| Keywords | Biotech, automation, fungi, biologic control, |
| Describe your Project: | |
| <ul style="list-style-type: none"> Throughout the development of our inaugural product, we've pioneered a groundbreaking technology for exponentially increasing fungal spores, vital as control agents for biopesticides and various other products reliant on fungi spores as active ingredients. This innovative production method boasts numerous advantages over traditional techniques, particularly in terms of energy and resource efficiency, as well as the heightened quality and purity of the end product, among other benefits. Our project's overarching objective is to transition from small-scale manufacturing to industrial-scale production by automating every facet of the spore production process. Through this automation initiative, we aim to not only enhance production efficiency but also to scale up our operations to meet growing global demand while maintaining uncompromising standards of excellence and sustainability. | |
| Describe the innovative part of your project: | |
| <ul style="list-style-type: none"> A fundamental component of biopesticides lies in filamentous fungi spores, traditionally propagated within organic media. Presently, the predominant method for fungi spore multiplication relies on cooked rice as the primary substrate. However, this approach is not without its drawbacks, as it consumes substantial quantities of rice, proving costly and yielding suboptimal efficiency. In response, we've pioneered a novel fungi multiplication process that eliminates the need for rice altogether. This innovative method has demonstrated remarkable efficiency and offers several compelling advantages over traditional approaches. Our project's primary objective is to upscale this groundbreaking process, transforming it into a robust industrial-scale operation. By doing so, we aim to establish a highly effective and sustainable solution that revolutionizes the production of biopesticides and other fungi-spore-based products on a global scale. | |
| Describe the market expectations of your project: | |
| <ul style="list-style-type: none"> Biodefensive products, also known as biological products, encompass technologies that utilize organisms or natural substances to prevent, reduce, or eliminate pest and disease infestations in agricultural settings. Biologic control products, such as biopesticides and biostimulants, have gained global traction, with several countries adopting these technologies. Brazil leads the world in the utilization of such products, implementing this technology across more than 28% of its cultivated land. From 2018 to 2022, the Brazilian biodefense market experienced a remarkable 62% growth. Concurrently, recent research on the adoption of these products indicates a substantial increase in the total Brazilian biodefense market, which surged by 219%, reaching an estimated value of R\$3.3 billion. Moreover, | |

projections suggest continued expansion in the biological control market, with an anticipated value nearing R\$17 billion for the sector by 2030.

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| Possible Partner Profile: | | |
| Type of Partner Needed (multiple choices are allowed) | <input checked="" type="checkbox"/> SME <input checked="" type="checkbox"/> University <input type="checkbox"/> Administration | <input checked="" type="checkbox"/> Larger Company <input checked="" type="checkbox"/> Research Institution <input type="checkbox"/> Other (specify): |
| Describe the expertise of possible partner(s) required for your project: | | |
| <ul style="list-style-type: none"> We are currently seeking expertise in engineering, automation, and manufacturing process optimization to facilitate the automation of our fungi spore manufacturing process. As we aim to transition from hand manufacturing to an industrial-scale operation, we recognize the critical importance of these skill sets. Specifically, we require engineers proficient in industrial design and layout optimization, adept at devising efficient workflows and integrating automation solutions. Additionally, experts in automation and robotics are essential for developing and implementing robotic systems to streamline production tasks. Moreover, professionals skilled in manufacturing process optimization play a crucial role in analyzing our current processes, identifying inefficiencies, and devising strategies to optimize productivity and reduce costs. | | |
| Describe the role of possible partner(s) in your project: | | |
| <ul style="list-style-type: none"> The partner will be tasked with comprehensively understanding our current process of fungi spore mass production, with a focus on identifying inefficiencies and designing equipment to enhance productivity while minimizing the need for manual intervention. Additionally, we expect the partner to propose solutions for connecting different stages of the process seamlessly. This involves identifying and recommending and/or manufacturing equipment that can facilitate the smooth transition of materials and data between various production stages. | | |

Deadline for Partner Search:

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