Applicant Guide: Open Call for Cotton Producers

1. Introduction and Purpose

Biome Makers is an agricultural technology company specialized in integrating soil microbiology into decision-making to improve the health of soils and their crops. Through our BeCrop® technology, we combine next-generation DNA sequencing with Artificial Intelligence to understand the metabolic and ecological functions of the soil microbiome, transforming complex biological data into practical solutions for the farmer.

In other words, we use the soil microbiome as a biomarker that allows to improve decision-making aimed at:

- Improving overall soil health and its biodiversity.
- Reducing the use of chemical inputs and optimizing crop yields.
- Preventing diseases and improving crop resilience.

As part of our commitment to the future of agriculture, we allocate 2% of our global revenue to R&D activities to improve soil health and the sustainability of agricultural ecosystems through the Fields4Ever initiative.

On this occasion, we seek to support cotton producers who want to evaluate the health of their soils. Cotton farming is one of the great economic and textile engines of the world, but historically it has exerted strong pressure on natural resources. Today, the transition towards more sustainable and regenerative agronomic practices is vital for the future of the sector. With this call, we want to provide actionable insights to cotton farmers for improving their soils, as well as explore the relationship between soil health and fiber quality. Our goal is to demonstrate that a balanced microbiome not only optimizes resource use and protects the crop, but also translates directly into stronger, more uniform, and higher quality cotton fibers.

2. What do we offer?

Selected participants will receive, completely free of charge, the BeCrop® advanced soil microbiome analysis, with results delivered within 3 weeks of receiving their samples. This analysis provides a detailed digital report that includes:

- **Nutrient Bioavailability:** The ability of microorganisms to mobilize nitrogen, phosphorus, potassium, and other nutrients.
- **Crop Health:** Early identification of pathogens, natural biocontrol agents, and plant growth-promoting microorganisms.
- **Overall soil quality:** In terms of biodiversity, functionality, sustainability, or resilience

against stress factors.

3. Logistics and sample shipping

The number of soil samples analyzed for free for each participant is not fixed. Our team will assign the number of samples on an individual basis depending on the size and characteristics of each farm. In this way, we guarantee that the sampling has an optimal statistical representativeness of the actual conditions of your operation.

Participants will cover the logistical costs of shipping the samples. As this is an international call, Biome Makers will be responsible for managing and providing all necessary import permits to comply with customs and phytosanitary regulations. Once your project is selected, our team will coordinate the sampling materials with you based on your location, indicate the most convenient destination laboratory for your region (whether in Spain, the United States, or through our network of partner laboratories) and provide you with detailed instructions to carry out the shipment smoothly.

4. Requirements to participate

The main requirement to participate in the call is to be a cotton farmer, consultant, farm manager, or researcher. Our team will request participants to provide and send both soil samples and cotton fiber samples corresponding to the same area of study.

The soil microbiome can be very sensitive to weather conditions, soil properties, or the history of agricultural management. Therefore, to define the context of the study as much as possible and best interpret the results, we will ask participants for the following additional information, if available:

- **Sampling metadata:** Date of sampling, geographic coordinates, soil type.
- **Yield data:** (kg/ha, quality, etc.).
- **Management context:** Brief information about the applied practices (whether they are regenerative, type of biological inputs used, etc.).

5. Evaluation and Selection Criteria

Given that the call has a limited quota of participants and budget, our scientific and agronomic team will evaluate the applications based on the following criteria:

- **Availability of historical data:** Farmers who can provide a good record of data on their crop yields, previous agronomic management, or physical quality of their fibers will be highly valued. This information is key to cross-referencing the data and maximizing the value of the study.
- **Management practices:** The information provided about crop management will be

taken into account, valuing the interest in or transition towards sustainable or regenerative agronomic practices.

- **Geographic diversity and representativeness:** We seek to support producing farms located in various cotton regions globally to enrich the comparative aspect of the study.

6. Confidentiality and Commitment

All information provided by the farmer will be treated with strict confidentiality. The collected data will be used exclusively for agronomic research and development purposes, guaranteeing that individual identifiable data will never be published or shared with third parties without the prior and explicit consent of the participant.

The processing of all personal data, metadata, and agronomic results will be carried out in strict compliance with our Privacy Policy and Terms of Use. Participation in this call implies acceptance of these. For more detailed information on how we protect, manage, and store your information, we invite you to consult the complete legal documents available on our official website: Privacy Policy and Terms of Use

7. Application Process

- You can apply now!
- Our team will review applications and contact selected participants.
- BeCrop® results are delivered within 3 weeks of receiving the samples.

To participate, you just have to complete the online form available on the call's website. If selected, the Biome Makers team will contact the applicant to coordinate the sample collection process.

Contact for inquiries**:** Irene Baena (Irene.baena@biomemakers.com)