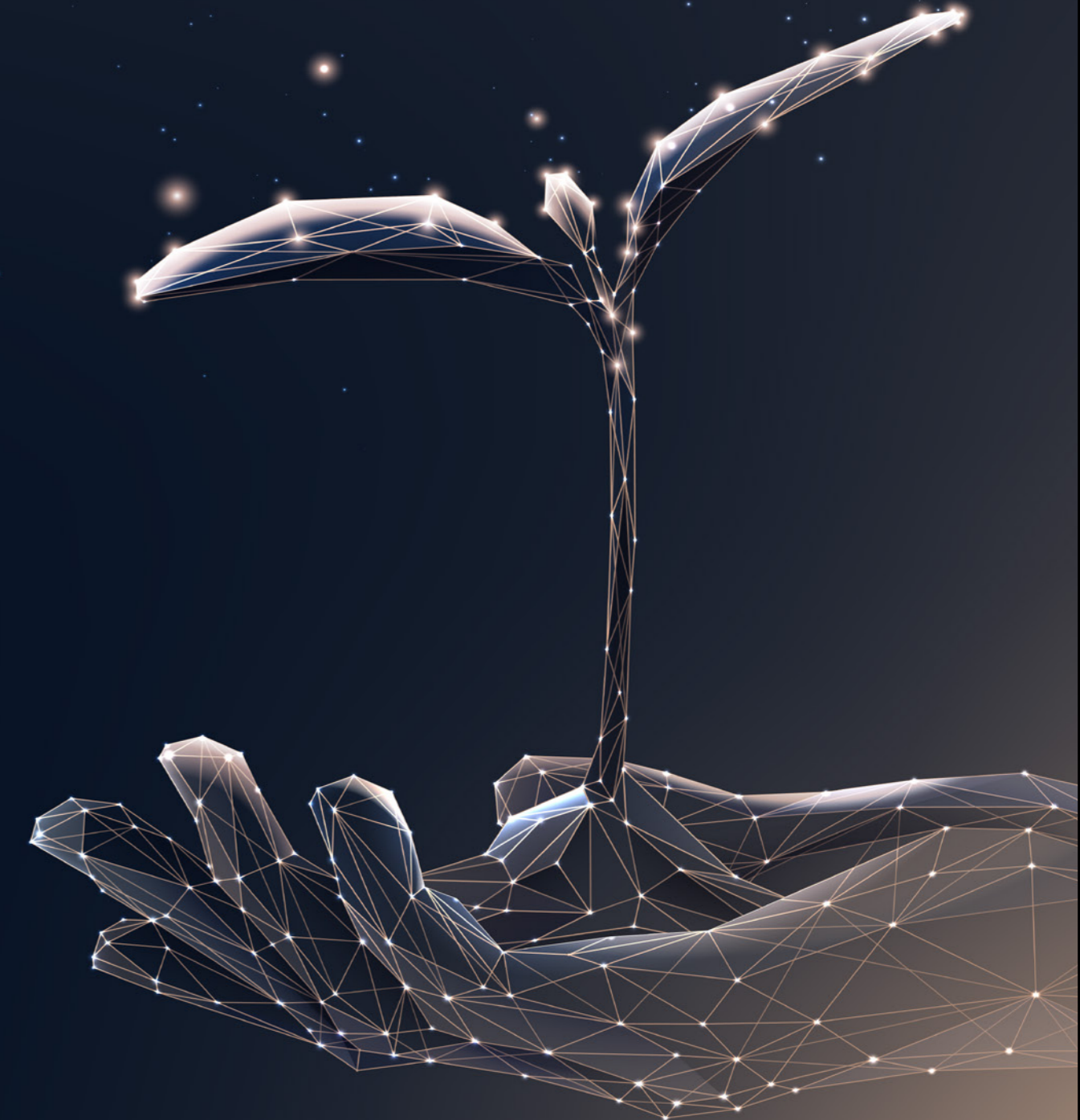




Biological Crop Input Use Survey

LATAM - 2025

+ Sentiment Analysis + Valuable Trends & Insights + Cost Effective



AgbioInvestor bioMR 2025

Analytical Market Research

As the agricultural industry changes, new market sectors are emerging, holding significant growth potential for companies positioned to exploit these opportunities.

AgbioInvestor MR's global market research provides unique insights into niche markets where disrupting technology is increasingly altering the agricultural landscape.

With a focus on timeliness and quality and with capabilities across all key crop-growing regions, AgbioInvestor MR leverages our industry expertise together with insightful and detailed information gained through market research to provide powerful insights into crop input usage across key high-value crop markets, enabling a greater understanding of market dynamics and grower product choice.



Objectives

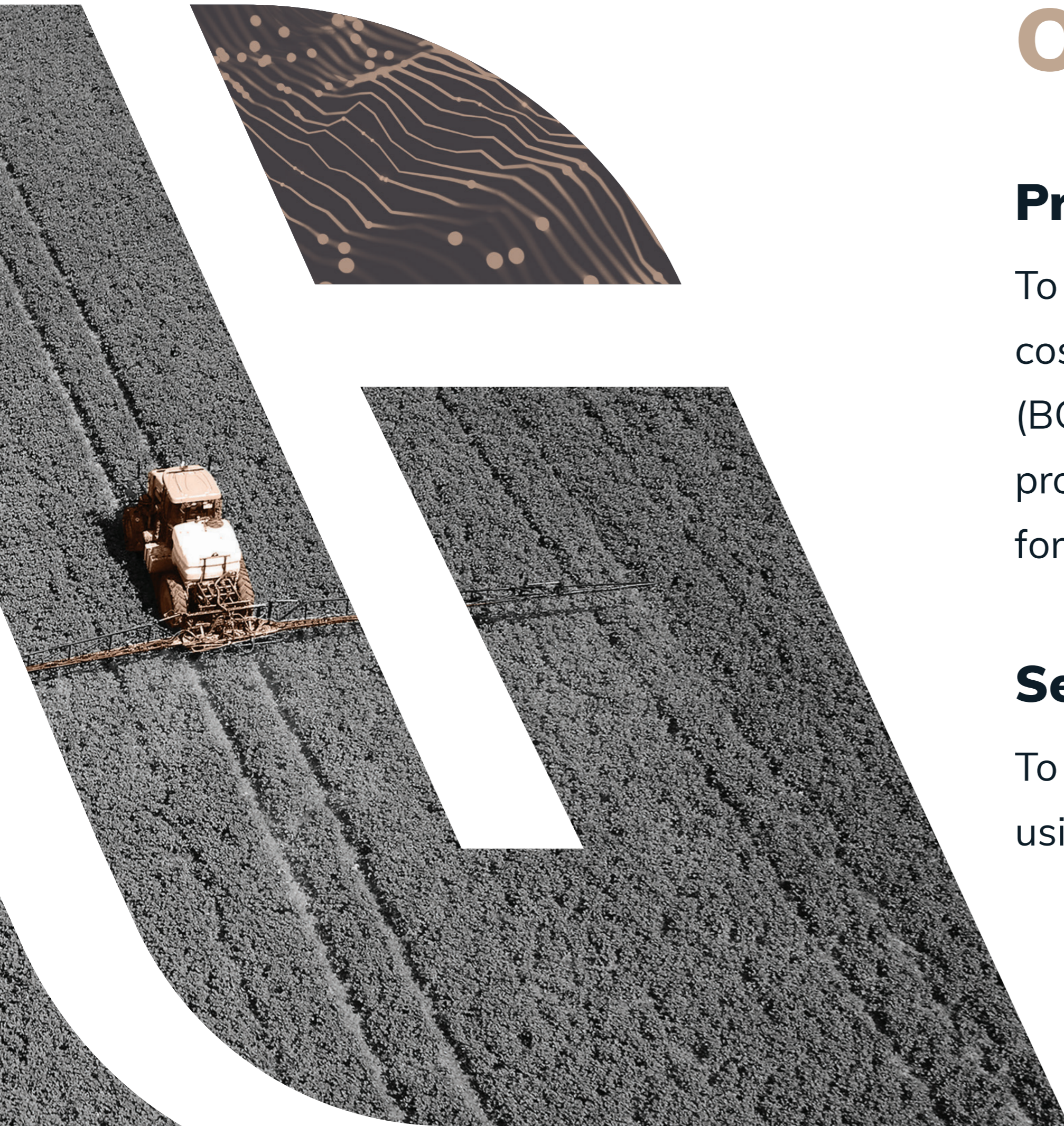
bioMR
2025

Primary Aim

To understand grower usage (e.g. treated acres, costs, key brands etc.) of Biological Crop Inputs (BCI) in the key crop/country markets, with a view to providing a representative view of the total market for such products in the 2025 agricultural year.

Secondary Aim

To understand grower behaviours and experience of using BCI.



Approach and Study Design



Country Coverage

- ✓ Argentina, Brazil, and Chile
- ✓ Key crops harvested in 2025



Target Groups / Screening

- ✓ Growers using Bio Crop Inputs
- ✓ CATI / F2F / Online interviews where appropriate



Questionnaire

- ✓ Quantitative questions to meet Primary Aim
- ✓ Qualitative questions to meet Secondary Aim

Farmer interview length expected to be max 25 minutes

Target Products and Definitions

Survey undertaken with Bio Growers – growers using **Biopesticides** or **Biostimulant** products:

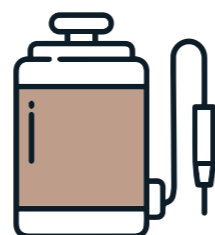
Biopesticides & Associated Products

Biopesticides

- + Microbials (e.g. bacteria, fungi, yeast)
- + Macrobials (e.g. insect pest predators nematodes)
- + Natural Products (e.g. plant oils, plant extracts)
- + Basic substances (e.g. acetic acid, COS-OGA)
- + Pheromones (e.g. insect mating disruptants)

Bio-Aligned

- + Inorganics (e.g. copper, sulphur)
- + Fermentation Products (e.g. abamectin, spinosad)
- + Hybrids (e.g. chemistry + biological products)



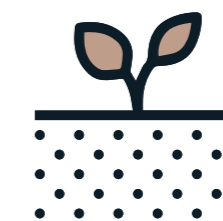
Biostimulants & Speciality Fert.

Biostimulants

- + Seaweed extracts (e.g. Ascophyllum nodosum extract)
- + Amino acids (e.g. glycine betaine)
- + Plant hormones (e.g. cytokinin, gibberellins)
- + Humic acids (e.g. humic acid, fulvic acid)
- + Microbials (e.g. inoculants, micorhizae)

Speciality Fert.

- + Chelated Micronutrients
- + Soil Conditioners
- + Pre-inoculants



Products for e.g. Stress Mitigation, Nutrient Use Efficiency, quality improvement etc. which are not just fertilisers.

All application types will be considered

(e.g. seed treatment, foliar, soil), whilst bio users will also be asked for information on conventional products used in the program to understand position of bio products within hybrid programs.

Questionnaire

Screening

Growers must:

- ✓ Be responsible, involved in choice or make decisions for Crop Inputs
- ✓ Have cultivated one of the target crops
- ✓ Have used any biological / natural pesticides or biostimulants in 2025

Quantitative Section

Aims to collect information on key quantitative measures:

- ✓ Crop Area cultivated
- ✓ Product/Brand used
- ✓ Treated Area
- ✓ No Applications & Application Rate
- ✓ Cost
- ✓ Reasoning for application (Open)
- ✓ Satisfaction (Scale 1-5) and satisfaction reasoning (set answers)

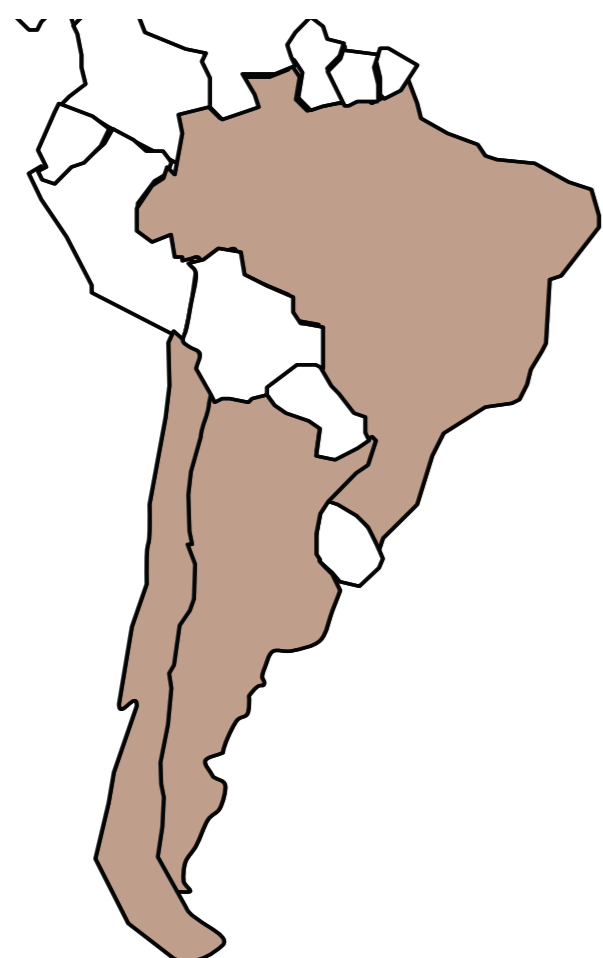
Qualitative Section

Series of short open questions about why growers used bio inputs, whether would use again, what characteristics valued most and where recommendations came from.



Crop/Country Matrix

Region	Banana	Citrus	Coffee	Cotton	Horticulture	Maize	Pome/Stone	Potato	Soybean	Sugarcane	Tree Fruit/ Nuts	Vine	Wheat	Total
Argentina		50				100	50		150	50			100	500
Brazil	100		150	250	500	250			800	200	250			2500
Chile					150	50		75			125	100		500
Total	100	59	150	250	650	400	50	75	950	250	375	100	100	3,500



3 **3 Countries Surveyed**

13 **13 Key Crops**

Note: No. surveys subject to finding number of bio users.

Country: Argentina

A mixture of field crops and specialties makes Argentina a complex market to survey. Biostimulants are anticipated to be important in field crops, notably Soybeans (e.g. inoculants) and perhaps Wheat, with biological / natural pesticides likely to be relatively more important in pome / stone (e.g. pheromones, granuloviruses for Lep. control) and citrus (e.g. inorganics).



Crop Group	Crop	Cut-Off Size	No. Interviews
F&V	Citrus	>5 Ha	50
Field Crops	Maize	>50 Ha	100
F&V	Pome/Stone	>5 Ha	50
Field Crops	Soybean	>150 Ha	150
Plantations	Sugarcane	>20 Ha	50
Field Crops	Wheat	>100 Ha	100



Sampling Plan

Sample Broken Down by Key Province Acreages



Interview Type

CATI - Computer-assisted telephone interviewing



Agricultural Year

July To June

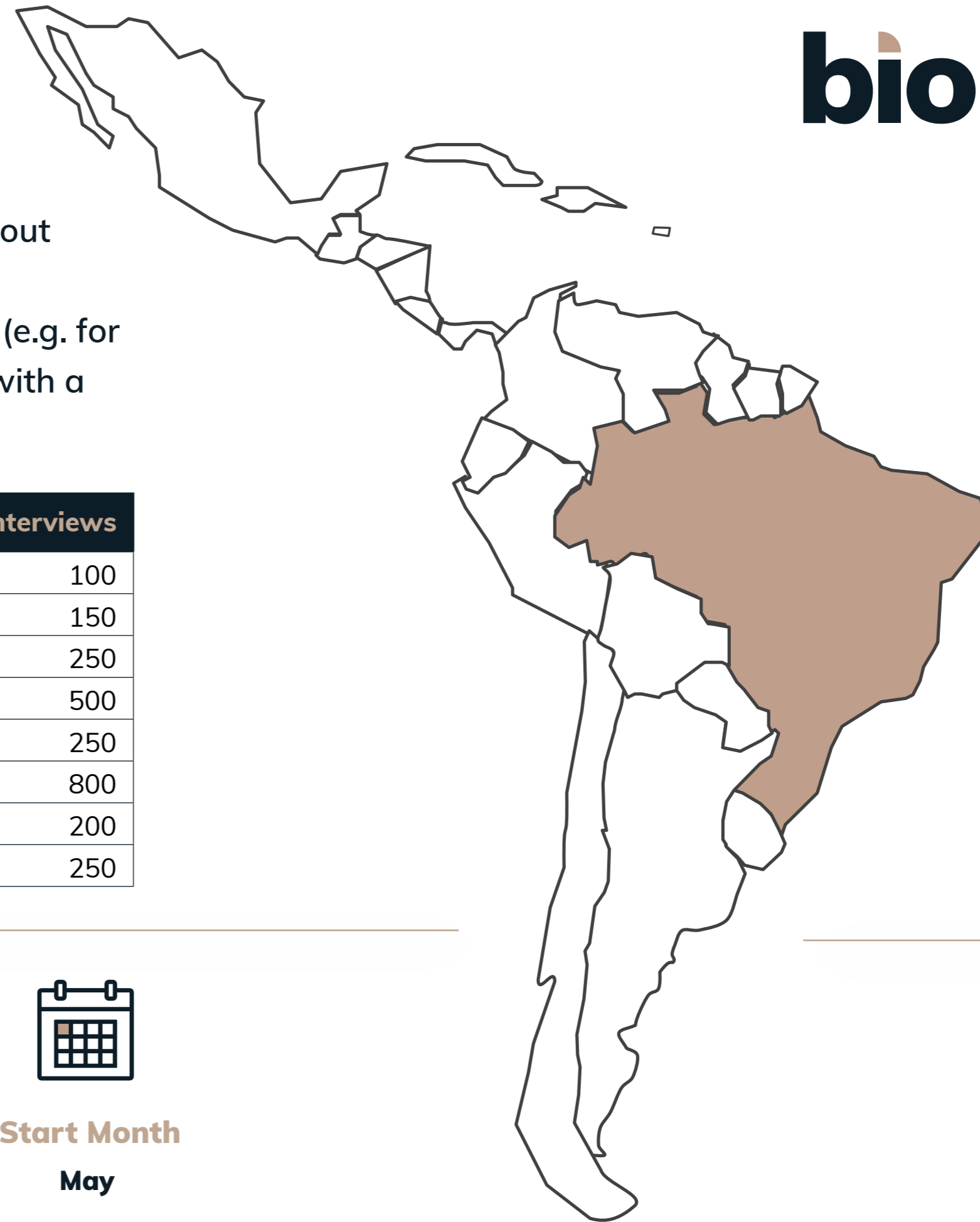


Start Month

May

Country: Brazil

Brazil grows a diversity of specialty and field crops, however it is a standout market for strong growth of bio options in a field setting. Field crops are targeted alongside some specific specialties of interest. Seed treatments (e.g. for nematode control) as well as inoculants may be important in soybeans, with a variety of microbial products likely to be of importance in other crops.



Crop Group	Crop	Cut-Off Size	No. Interviews
Plantations	Banana	>2 Ha	100
Plantations	Coffee	>5 Ha	150
Field Crops	Cotton	>150 Ha	250
F&V	Horticulture	>1 Ha	500
Field Crops	Maize	>10 Ha	250
Field Crops	Soybean	>100 Ha	800
Plantations	Sugarcane	>50 Ha	200
F&V	Tree Fruit/Nuts	>2 Ha	250



Sampling Plan

Sample Broken Down by Key State Acreages



Interview Type

CATI - Computer-assisted telephone interviewing



Agricultural Year

July To June

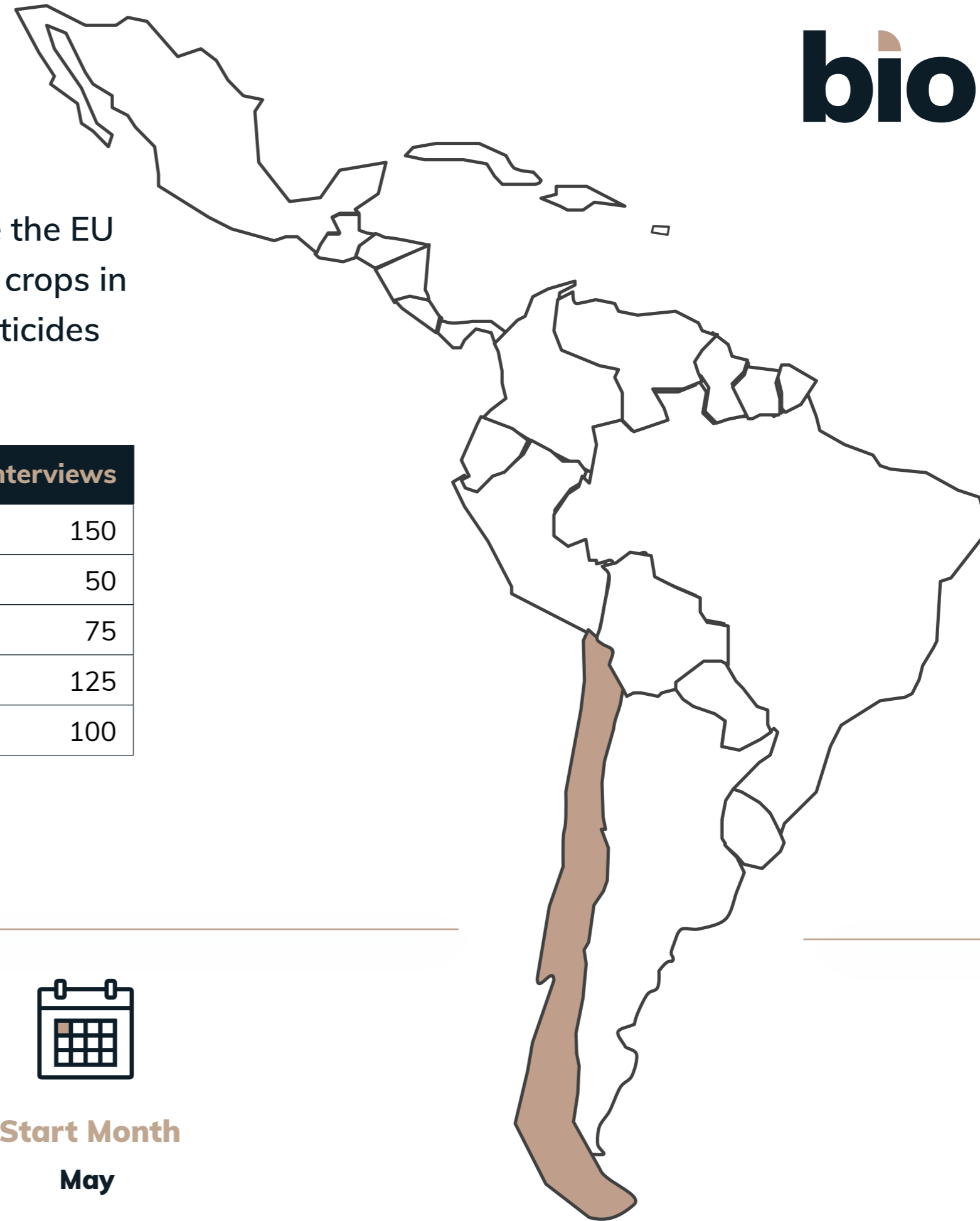


Start Month

May

Country: Chile

Chile is an important exporter of fresh produce to developed markets like the EU and USA. Vine, tree fruit and horticultural produce are all important, and crops in which there is a strongly developing market for biostimulants and biopesticides from local and foreign entities.



Crop Group	Crop	Cut-Off Size	No. Interviews
F&V	Horticulture	>0.5 Ha	150
Field Crops	Maize	>2.5 Ha	50
Field Crops	Potato	>1.5 Ha	75
F&V	Tree Fruit/Nuts	>2.5 Ha	125
F&V	Vine	>2.5 Ha	100



Sampling Plan

Sample Broken Down by Key Province Acreages



Interview Type

CATI - Computer-assisted telephone interviewing



Agricultural Year

July To June



Start Month

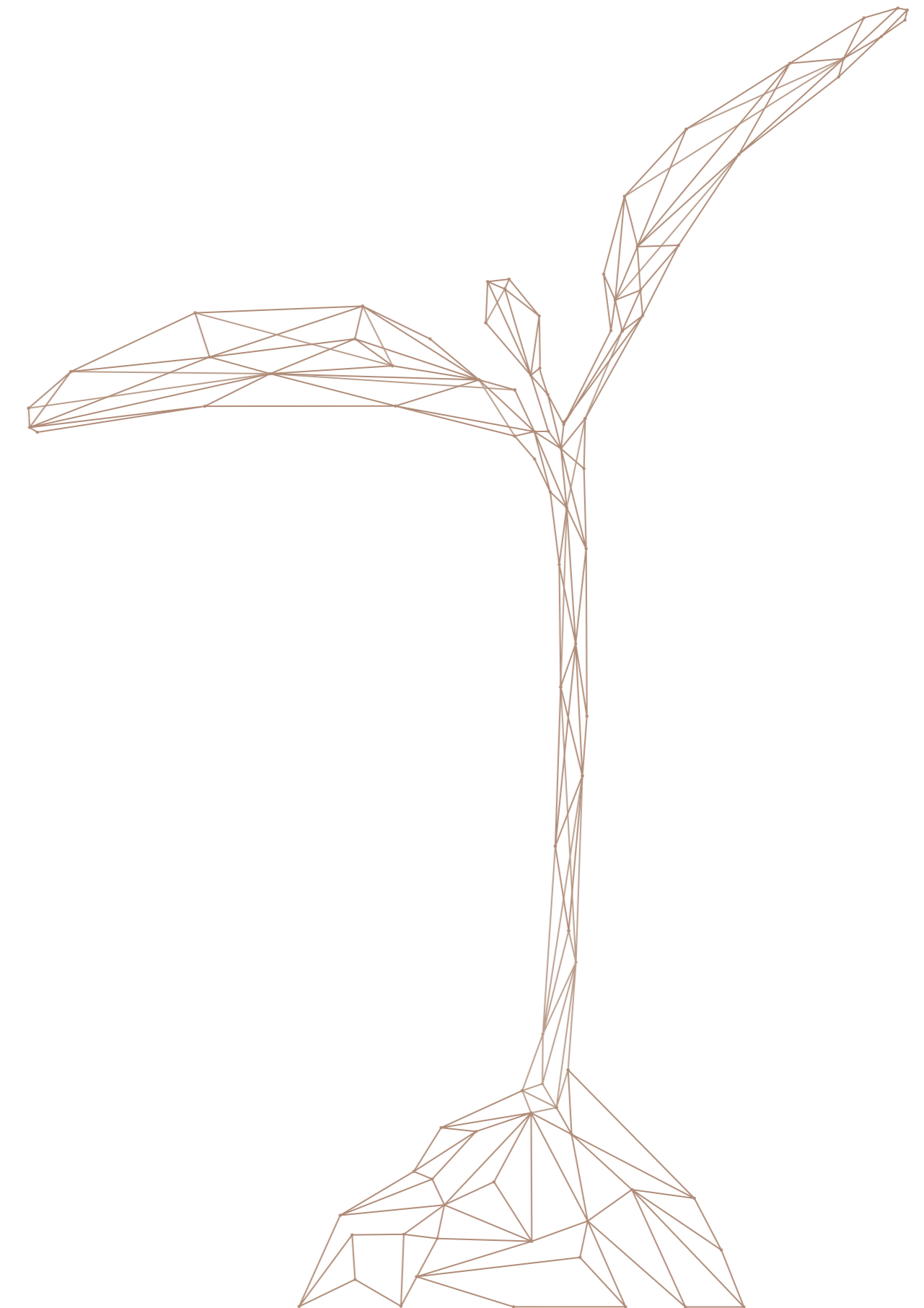
May

Study Caveats

Study depends upon surveying growers using bio products.

The low % of growers using these products makes reaching these growers more difficult and increases the survey effort required. In some cases, there may be a re-prioritisation of survey effort between crops if not enough growers can be found to meet the allocated quota.

Seed Treatment product information is likely to depend upon the route of purchase – more grower information is likely with products treated on-farm than via the industry, as growers may not know what ST was applied to the bag. In these cases, assumptions may be made on the basis of Seed Company (e.g. Becks and MBI agreement).



Deliverables Overview

Data

- ✓ Cleaned and extrapolated data for each country
- ✓ Raw data in cleaned and normalised form
- ✓ Sentiment analysis for qualitative questions

Reporting

- ✓ Executive summaries
- ✓ Slide deck with key findings
- ✓ Power BI dashboard for investigating data



	A	B	C	
1	Country	Survey Crd	Application Typ	Label
2	Spain	Vine	Foliar	Foliar
3	Brazil	Soybean	Foliar	Foliar
4	USA	Vine	Foliar	Foliar
5	Spain	Horticulture	Foliar	Foliar
6	USA	Maize	Foliar	Foliar
7	Brazil	Soybean	Foliar	Foliar
8	USA	Vine	Foliar	Foliar
9	France	Vine	Foliar	Foliar
10	Spain	Olives	Foliar	Foliar
11	Brazil	Soybean	Soil	Foliar
12	Brazil	Citrus	Foliar	Foliar
13	Italy	Vine	Foliar	Foliar



Join the Biological Crop Input Use Survey

LATAM - 2025



Contact Sales

James Moyes

moyes.j@agbioinvestor.com

agbioinvestor.com

Phil Mac Associates LLP trading as AgbioInvestor. Registered in Scotland. Company Number SO306534. Registered Office: Suite 18, Vineyard Business Centre, Pathhead, Midlothian, EH37 5XP, Scotland. A list of members of Phil Mac Associates LLP is available here: agbioinvestor.com/team

Agbioinvestor Europe Limited. The Exchange, George's Dock, I.F.S.C. Dublin 1, Dublin. Company Number: 675582

