



bioMR
2025

Biological Crop Input Use Survey

North America - 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



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

- ✓ Canada, Mexico, and USA
- ✓ 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:

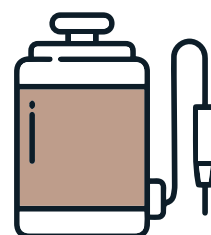
Biopesticides & Associated Products

Biopesticides

- + Microbials (e.g. bacteria, fungi, yeast)
- + Macroimals (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)



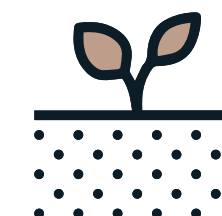
Biostimulants & Speciality Fert.

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	Cotton	Horticulture	Maize	Oilseed Rape	Pome/Stone	Potato	Soybean	Sugarcane	Tree Fruit/ Nuts	Tree Nuts	Vine	Wheat	Total
Canada		100		100	100	100						100	500
Mexico		100	150					100	100		50		500
USA	50	100	200		50		200			50	50		700
Total	50	300	350	100	150	100	200	100	100	50	100	100	1,700



3

**3 Countries
Surveyed**

12

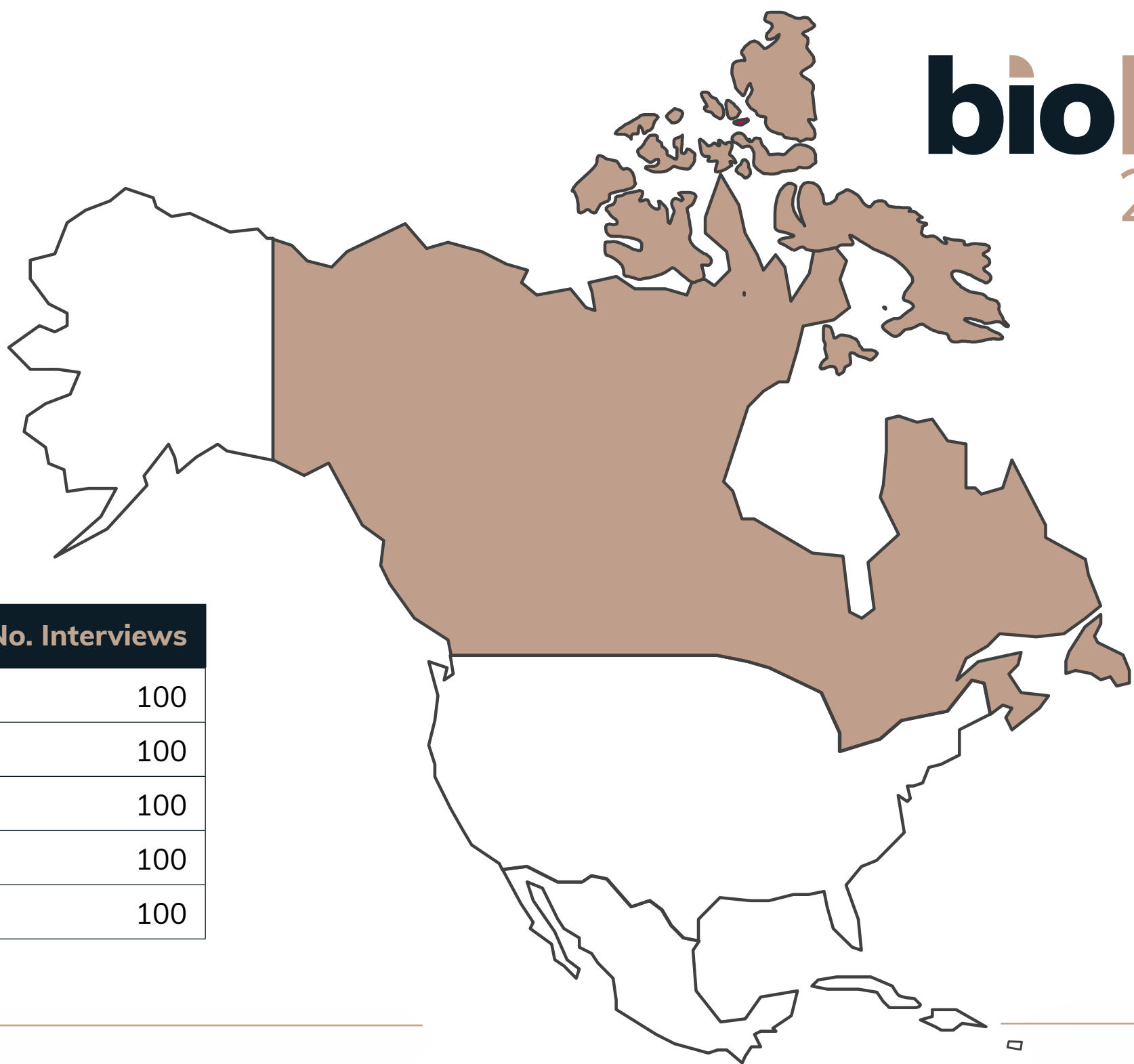
**12 Key
Crops**

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

Country: Canada

bioMR
2025

Much of the Canadian crop protection market is focused on broad acre crops, however specialties such as pome fruit and berries are important for biological use despite being grown on lower acreages.



Crop Group	Crop	Cut-Off Size	No. Interviews
Field Crops	Wheat	>50 Ha	100
Field Crops	Canola	>50 Ha	100
F&V	Potato	>10 Ha	100
F&V	Pome / Stone Fruit	>2 Ha	100
F&V	Horticulture	>2 Ha	100



Sampling Plan

Sample Broken Down by
Key State Acreages



Interview Type

CATI - Computer-assisted
telephone interviewing



Agricultural Year

**October To
September**



Start Month

August

Country: Mexico

Mexico is an important producer of a range of fruits and vegetables, with maize the most important field crop, with the majority for local consumption. Biopesticides and biostimulants used in the Mediterranean region of Europe find suitability in Mexico in part due to similar crops and climate, and European companies have invested significantly in a position within the country.

Crop Group	Crop	Cut-Off Size	No. Interviews
F&V	Horticulture	>2 Ha	100
Field Crops	Maize	>5 Ha	150
Plantations	Sugarcane	>5 Ha	100
F&V	Tree Fruit/Nuts	>5 Ha	100
F&V	Vine	>5 Ha	50



Sampling Plan

Sample Broken Down by
Key Province Acreages



Interview Type

CATI - Computer-assisted
telephone interviewing



Agricultural Year

**October To
September**



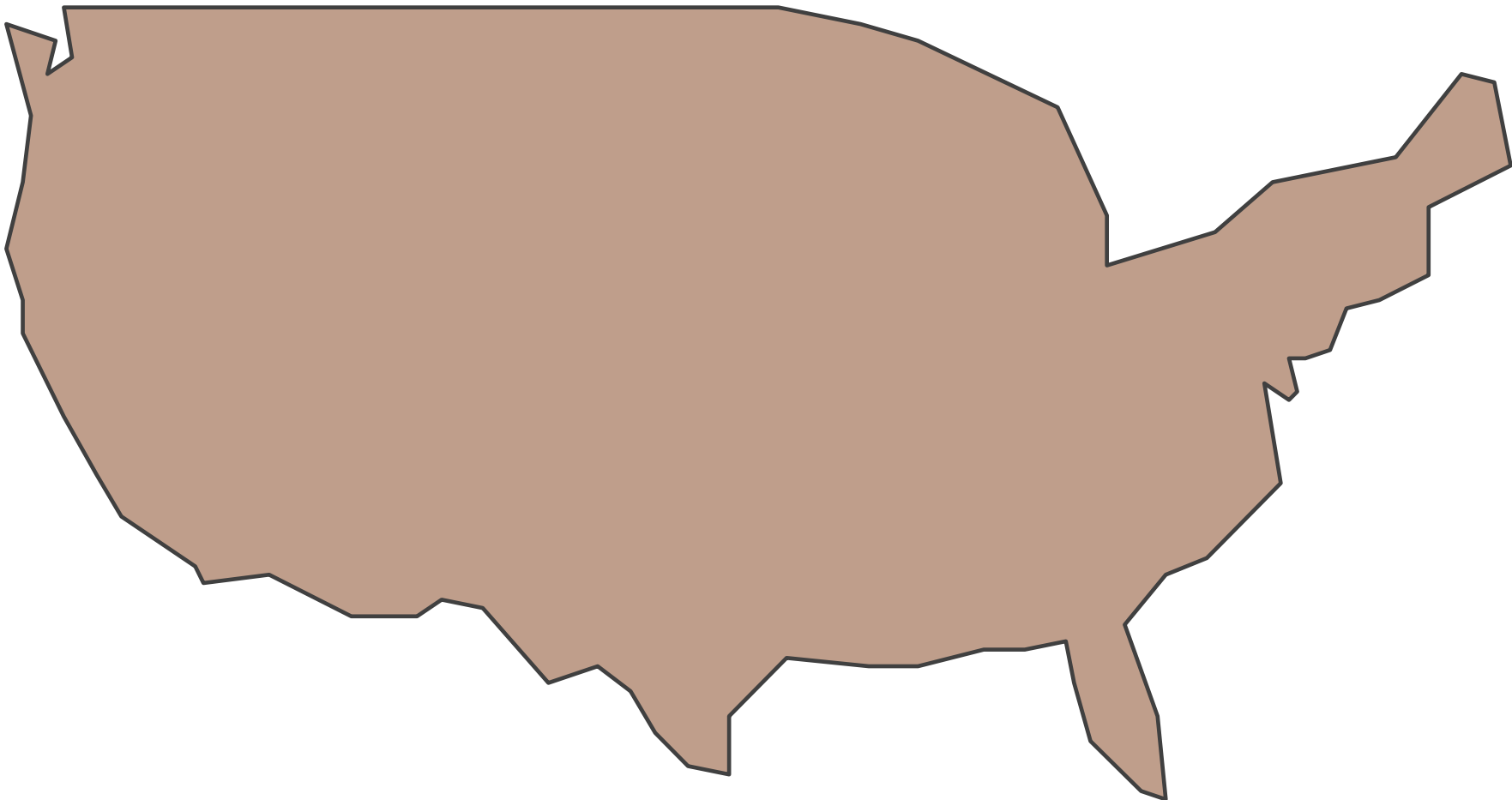
Start Month

May



Country: USA

The USA has seen significant development of biological crop inputs, with specialties in the likes of California being of key importance, and Soybean, Maize and Cotton increasingly important for seed treatments and biostimulants.



Crop Group	Crop	Cut-Off Size	No. Interviews
Field Crops	Cotton	>25 Ha	50
F&V	Horticulture	>1 Ha	100
Field Crops	Maize	>200 Ha	200
F&V	Pome/Stone	>5 Ha	50
Field Crops	Soybean	>150 Ha	200
F&V	Tree Nuts	>2 Ha	50
F&V	Vine	>1 Ha	50



Sampling Plan

Sample Broken Down by
Key State Acreages



Interview Type

CATI - Computer-assisted
telephone interviewing



Agricultural Year

**January To
December**



Start Month

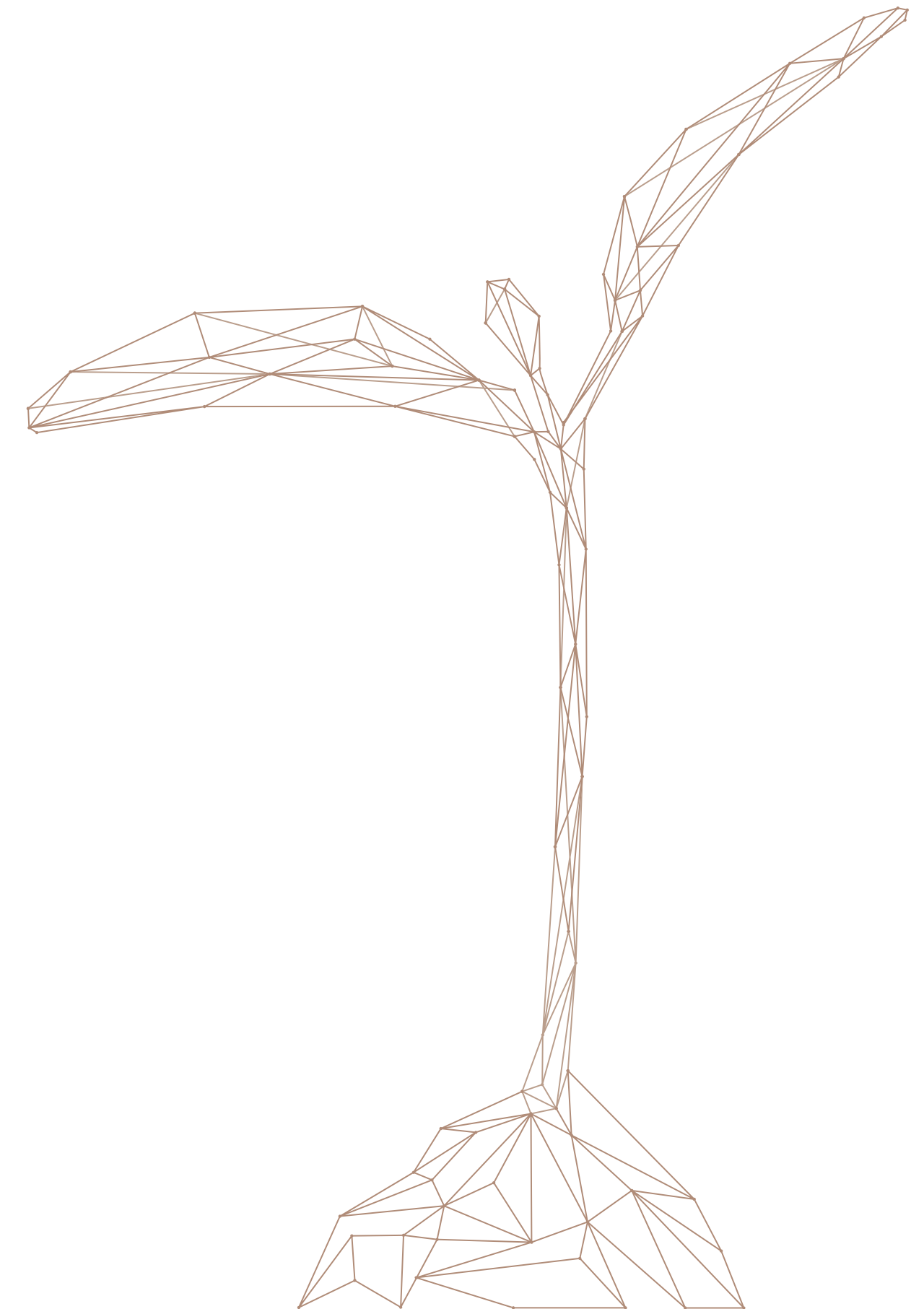
**November /
December**

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

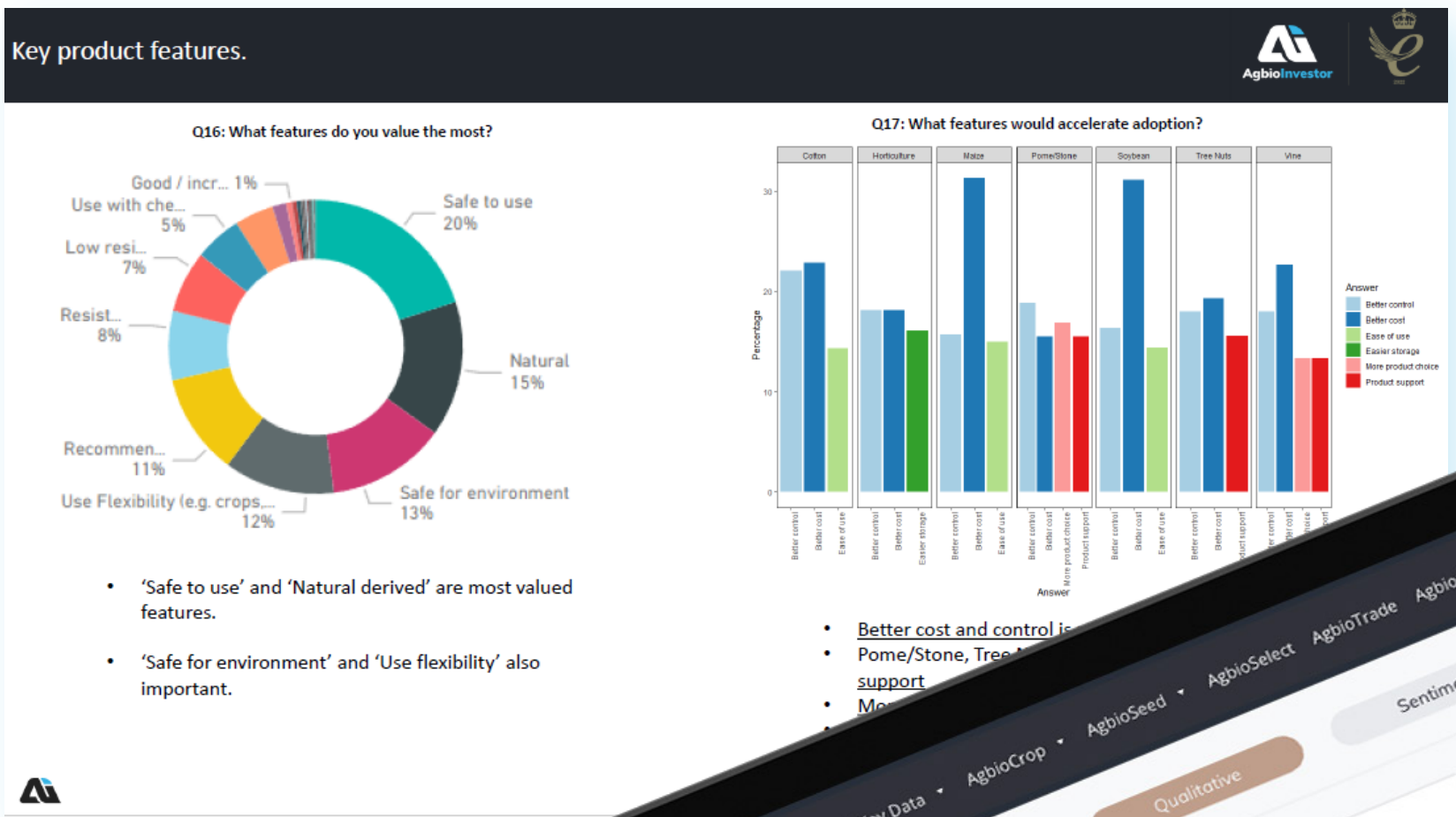
Data

- ✓ 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 Crop	Application Type	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

North America - 2025



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