

Alliance





Agronomic advances for understanding soil health

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Bioversity International and the International Center for Tropical Agriculture (CIAT) are CGIAR Research Centers. CGIAR is a global research partnership for a food-secure future.

Typical production environments



Multi-locational and long-term trials/observatories

Type of response to fertilizers	Occurrence
Non-responsive low production	21%
Non-responsive high production	4%
Low response	28%
Moderate response	36%
High response	11%



- Influencing factors
 - Ca:Mg
 - Zn
 - B
 - Mn
 - Al





Meta-analyses and agronomic surveys



Beyond quantity produced



Reflections

- Multi-location and long-term trials provide complementary perspectives to understanding soil health and ecosystem services
- Agronomic surveys is an approach of understanding landscape level crop productivity coupling management and biophysical attributes
- Contributions of soil management to produce quality is relatively new area of study furthering understanding of soil-based ecosystem services