

DIAGNOSTIC TOOLS FOR ASSESSING SOIL FUNCTIONAL DIVERSITY AND HEALTH

Measuring soil impact

Cost-effective and practical tools for assessing the impact of bioinoculants on soil biodiversity and soil health are lacking.



A composite indicator for the evaluation of the effects of bioinoculants on soil functional biodiversity has been developed.







A QR Code is generated by using the fluorometric intensities of PCR-based data.



A Decision Support System (DSS) for soil quality assessment based on basic physico-chemical parameters has been developed.

Benefits

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For farmers
 Clearer soil quality insights. Long-term environmental and economic gains.
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For industries
 Stronger credibility with validated data. Better tools for support and differentiation.
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For researchers
 More transparent data and collaboration. Innovative, streamlined soil analysis.
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For policy makers
 Simple, precise soil classification. Index combines key properties, including biology.

Key outcome

The integration of bioinoculants into a web platform based on the SIMCA DSS Model enables advanced data analysis and decision-making for soil quality assessment. This user-friendly tool addresses a critical gap by simplifying the complexity of bioinoculant application and monitoring, especially for non-technical users.

