Monster indieningsvorm 2023

Sample submission form 2023

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Belangrik | Important

Elke indiening van monsters moet met hierdie vorm vergesel word. Beskrywing van ontledings op laaste bladsy.

Each submission of samples must be accompanied with this form. Description of analyses on last page.

PRODUSENT/PLAAS INLIGTING | PRODUCER/FARM INFORMATION	
Naam / Kontakpersoon Name / Contact person	
Monster geneem deur Sample taken by	
Plaasnaam Farm name	
Telefoonnommer Telephone number	
VERTEENWOORDIGER INLIGTING | REPRESENTATIVE INFORMATION	
Naam Name	
Datum monster geneem Date sample taken	
E-pos E-mail	
Telefoonnommer Telephone number	
Resultate aan Results to	
FAKTUURBESONDERHEDE | INVOICE DETAILS	
Naam van persoon/maatskappy Name of person/company	
Posadres Postal address	
BTW Reg nr | VAT Reg nr	
Persoon/Maatskappy registrasienommer Person/Company registration number	
Telefoonnommer | Telephone number	
E-pos van finansiële persoon E-mail of financial person	
Bestelnommer | Order number	

DUI ASB AAN (X) WATTER ONTLEDING BENODIG WORD | PLEASE INDICATE (X) WHICH ANALYSIS IS REQUIRED

Grondmikrobiese Gemeenskapsontledings / *Soil Microbial Community Analysis*	☐	NGS Sequencing and/or Bioinformatics (*Minimum 10 samples*)	☐	
Grondensiemontleding / *Soil Enzyme Analysis*	☐	Plaattellings van Bakterieë of Fungi / *Plate Counts of Bacteria or Fungi*	☐	
Kwantifiseering van Stikstofbindende Bakterieë / *Quantification of Nitrogen-Fixing Bacteria*	☐	Identifikasie van Bakterieë of Fungi / *Identification of Bacteria or Fungi*	Genus ☐	Species ☐

Kommentaar | Comments:

Blok nr Block no	Vorige gewas Previous crop	Huidige gewas Current crop	Beoogde gewas Intended crop	Grondtoevoegings (bv. Kompos, dekgewas, mikrobes) Soil amendments (e.g. compost, cover crop, microbes)

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INLIGTING: Beskrywing van ontledings

Grondmikrobiese Gemeenskapsontledings—10-15 werksdae

Ons maak gebruik van 'n molekulêre vingerafdruktegniek om 'n profiel vir elke saamgestelde grondmonster te genereer. Ontleding van die steekproef stel ons in staat om die diversiteit te ondersoek en veranderinge in die mikrobiese gemeenskap te monitor. Hierdie inligting is noodsaaklik om te bepaal hoe goed die biologiese grondbestuurstrategieë presteer.

Grondensiemontleding—10-15 werksdae

Hierdie toetse kan aandui hoeveel voedingstowwe (o.a. koolstof, stikstof en fosfor) beskikbaar is, en of daar voldoende potensiaal is om hierdie voedingstowwe te voorsien. Hierdie toetse gee ook ‘n aanduiding of mikrobes aktief ensieme produseer om voedingstowwe beskikbaar te maak vir die plant.

Kwantifiseering van Stikstofbindende Bakterieë—10-15 werksdae

Deur gebruik te maak van kwantitatiewe polimerase kettingreaksie (qPCR), is ons in staat om die relatiewe vlakke van die organismes in die grond te monitor.

NGS Sequencing en/of Bioinformatika—2-3 maande

NGS sequencing is soortgelyk aan die molekulêre vingerafdruktegniek wat ons gebruik, maar ons kan teen ‘n hoër resolusie diversiteit en mikrobiese gemeenskapsamestellings bepaal. Hierdie tegniek kan ook ‘n aanduiding gee van die potensiële genera van mikrobes in die grond.

Plaattellings van Bakterieë of Fungi—10-15 werksdae

Hierdie tegniek word algemeen gebruik om die hoeveelheid kolonievormende eenhede (KVE) van biologiese produkte te bepaal. Hierdie tegniek word nie aanbeveel vir grondmonsters nie.

Identifikasie van Bakterieë of Fungi (Genus of Spesies) - 15-20 werksdae

Ons gebruik molekulêre metodes om enkele mikrobes op grond van hul DNA-volgordes te identifiseer. Dit is meer akkuraat as om mikrobes op grond van morfologie of fisiologie te identifiseer.

<u>Vir meer inligting, kontak ons:</u>

E-pos: info@sporatec.co.za; tcon@sun.ac.za | Telefoon: 021 808 5807

Webtuiste: www.sporatec.co.za | Adres: JC Smuts Gebou, Kamer A330, Van der Byl Road, Stellenbosch, 7600

INFORMATION: Description of analyses

Soil Microbial Community Analyses—10-15 business days

We use a molecular fingerprinting technique to generate a profile for each composite soil sample. Analysis of the sample allows us to investigate the diversity and monitor changes in the microbial community. This information is essential to determine how well the biological soil management strategies are performing.

Soil enzyme analysis—10-15 business days

These tests can indicate how much nutrients (e.g. carbon, nitrogen and phosphorus) are available, and whether there is sufficient potential to provide these nutrients. This test also gives an indication if microbes are actively producing enzymes to make nutrients available for the plant.

Quantification of Nitrogen-fixing Bacteria—10-15 business days

By using quantitative polymerase chain reaction (qPCR), we are able to monitor the relative levels of the organisms in the soil.

NGS Sequencing and/or Bioinformatics—2-3 months

NGS sequencing is similar to the molecular fingerprinting technique we use, but we can determine diversity and microbial community compositions at a higher resolution. This technique can also give an indication of the potential genera of microbes in the soil.

Plate counts of Bacteria or Fungi—10-15 business days

This technique is commonly used to determine the colony forming units (CFU) of biological products. This technique is not advised for soil samples.

Identification of Bacteria or Fungi (Genus or Species)—15-20 business days

We use molecular methods to identify single microbes based on their DNA sequences. This is more accurate than identifying microbes based on morphology or physiology.

<u>For more information, contact us:</u>

Email: info@sporatec.co.za; tcon@sun.ac.za | Phone: 021 808 5807

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