|  |
| --- |
| Sampling times |
| March | 1 |
| Planting (April) | 2 |
| Week 1 after planting | 3 |
| Week 2 after planting | 4 |
| Week 3 after planting | 5 |
| May | 6 |
| June | 7 |
| July | 8 |
| August | 9 |
| September | 10 |
| October | 11 |
| November | 12 |
| **TOTAL Samples** | 192 |

Hi Turry,

it is good to hear that your field campaign is going well.

I would also do as Moritz suggested. For the isotope protocols you always need the concentration of ammonium andnitrate. I don`t know if this is something you do anyways in Kenya, but if possible, you could determine concentrations already there.

Best,

Claudia

Am 14.03.24 um 09:04 schrieb Moritz Lehmann:

Dear Turry

See my mail, below. Maybe it was not clear enough.

Sure, if you know how to do the NH4 transformation with hypobromite, you can do it there.You avoid storage problems, as nothing will happen to the N2O after transformation, and the sample is fixed. At the same time, N2O is easier to lose (keep samples upside down!)

If you bring the NH4 samples back home, you still have the opportunity to do some tests first, before you process all samples. But you may face storage problems. Anyway, I suggest to do it here, and keep the samples filtered and frozen until then.

As I said, for the nitrate samples (can then be the same 50ml sample), you filter them and keep them frozen (or if freezer is not an option at leat in the fridge).

Thomas/Claudia, anything to add?

Best

Moritz

On 14 Mar 2024, at 08:45, Ouma Turry Atieno [<turry.ouma@sdsc.ethz.ch>](mailto:turry.ouma@sdsc.ethz.ch" \o "mailto:turry.ouma@sdsc.ethz.ch) wrote:

Hello Moritz,

Thank you for your response. I would like to seek more clarity especially for ammonium.

**We have 2 options:**

1. Extract in Kenya at the experimental site labs
2. Extract at ETH labs like we did previously

Here are the timelines for extraction:

* In Kenya it is immediately possible on site
* At ETHZ it will delay for months before extraction (the entire campaign is 6 months long)

Kindly also advise on storage, for both soil and extracts depending on the option we advise on; is it at room temperature or in the freezer.

Thank you for your advise, we want to get these right the first time.

Best regards,

Turry

**From:**Moritz Lehmann <[moritz.lehmann@unibas.ch](mailto:moritz.lehmann@unibas.ch" \o "mailto:moritz.lehmann@unibas.ch)>  
**Date:**Wednesday, 6 March 2024 at 16:20  
**To:**Ouma Turry Atieno <[turry.ouma@sdsc.ethz.ch](mailto:turry.ouma@sdsc.ethz.ch" \o "mailto:turry.ouma@sdsc.ethz.ch)>  
**Cc:**Harris Eliza Jean <[eliza.harris@sdsc.ethz.ch](mailto:eliza.harris@sdsc.ethz.ch" \o "mailto:eliza.harris@sdsc.ethz.ch)>  
**Subject:**Re: Soil Extraction for Nitrate-N and Ammonium-N

Dear Turry

No need o extract for nitrate samples, for ammonium you can do it in the home lab. I suggest that you filter the samples (0.2uM) and keep the frozen or at least in the fridge.

Best

M

On 6 Mar 2024, at 13:57, Ouma Turry Atieno <[turry.ouma@sdsc.ethz.ch](mailto:turry.ouma@sdsc.ethz.ch" \o "mailto:turry.ouma@sdsc.ethz.ch)> wrote:

Dear Moritz,

We are now in Kenya for fieldwork and planning around soil extraction for Nitrate-N and Ammonium-N. Kindly advise on the timing of extraction and analysis.

We were wondering if this should ideally be done upon sampling and on site or we can continously sample then conduct this back in Switzerland at the end of the campaign-about 6 months to go.

Best regards,

Turry

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