

Jul 17, 2024

Plant Sample Preparation for ICP-AES Analysis of Salt-Stressed Plants

DOI

dx.doi.org/10.17504/protocols.io.4r3l2q3kql1y/v1



Maryam Rahmati Ishka¹

¹Boyce Thompson Institute (BTI)



Maryam Rahmati Ishka

Boyce Thompson Institute (BTI)

OPEN ACCESS



DOI: dx.doi.org/10.17504/protocols.io.4r3l2q3kql1y/v1

External link: http://n/a

Protocol Citation: Maryam Rahmati Ishka 2024. Plant Sample Preparation for ICP-AES Analysis of Salt-Stressed Plants. **protocols.io** https://dx.doi.org/10.17504/protocols.io.4r3l2q3kql1y/v1

Manuscript citation:

n/a

License: This is an open access protocol distributed under the terms of the **Creative Commons Attribution License**, which permits unrestricted use, distribution, and reproduction in any medium, provided the original author and source are credited

Protocol status: Working
We use this protocol and it's

working

Created: July 17, 2024

Last Modified: July 17, 2024

Protocol Integer ID: 103591

Keywords: ICP-AES sample, Salt stress



Disclaimer

n/a

Abstract

This procedure outlines the preparation of plant samples exposed to salt stress. For plants grown under treatments other than salt, a special buffer is needed to remove surface chemicals during the washing step. This protocol is specifically for samples grown under salt stress, as salt can be easily removed with water.

Image Attribution

n/a

Guidelines

n/a

Materials

Deionized water, balance scale, glass ICP tubes, and a Sharpie marker

Safety warnings



Ethics statement

n/a

Before start

n/a



Plant Sample Preparation for ICP-AES Analysis of Salt-Stressed Plants:

- 1 Record the fresh weight of roots and shoots separately for each seedling.
- 2 Quickly dip the roots and shoots in deionized sterile water for approximately 30 seconds.
- 3 Gently dry the samples with a paper towel.
- 4 Place the root and shoot samples separately in properly labeled envelopes.
- 5 Put all the envelopes in an oven at 80°C for two days.
- 6 Record the dry weight of the samples in ICP glass sample tubes.

Protocol references

n/a