

Upload image

Version 2

May 28, 2020

Protocol for whitefly genetic analysis V.2

PLOS One

Joachim Nwezeobi¹, Onyeyirichi Onyegbule², Chukwuemeka Nkere², Joseph Onyeka², Sharon van Brunschot³, Susan Seal³, John Colvin³

¹National Institute of Agricultural Botany, Cambridge, United Kingdom,

²National Root Crops Research Institute, Umudike, Umuahia, Abia State, Nigeria,

³Natural Resources Institute, University of Greenwich, Central Avenue, Chatham Maritime, Kent, United Kingdom

1 Works for me [dx.doi.org/10.17504/protocols.io.bd6gi9bw](https://doi.org/10.17504/protocols.io.bd6gi9bw)

Joachim Nwezeobi

ABSTRACT

Bemisia tabaci(*sensu latu*) is a group of >40 highly cryptic whitefly species that are of global agricultural importance, both as crop pests and plant-virus vectors. This protocol outlines the process for extracting genomic DNA from *B. tabaci* whiteflies and the steps taken in analysing the DNA sequences for identifying the identities of the whiteflies collected in eastern Nigeria


EXTERNAL LINK


<https://doi.org/10.1371/journal.pone.0232616>


THIS COLLECTION ACCOMPANIES THE FOLLOWING PUBLICATION

Nwezeobi J, Onyegbule O, Nkere C, Onyeka J, Brunschot Sv, Seal S, Colvin J (2020) Cassava whitefly species in eastern Nigeria and the threat of vector-borne pandemics from East and Central Africa. PLoS ONE 15(5): e0232616. doi: [10.1371/journal.pone.0232616](https://doi.org/10.1371/journal.pone.0232616)

FILES

- 

Whitefly DNA extraction, partial mtCO1 gene amplification and gel electrophoresis
by Joachim Nwezeobi
- 

Phylogenetic analysis
by Joachim Nwezeobi
- 

Genetic network and data analysis
by Joachim Nwezeobi