

Technology Transfer: From the Laboratory to the Diagnostician's Bench Series: High Throughput Sequencing

Part 2: International Guidelines and Practical Examples



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Resources mentioned during Dr. Massart presentation

High Throughput Sequencing For Plant Virus Detection and Discovery <https://doi.org/10.1094/PHYTO-07-18-0257-RVW>

Is There a “Biological Desert” With the Discovery of New Plant Viruses? A Retrospective Analysis for New Fruit Tree Viruses <https://doi.org/10.3389/fmicb.2020.592816>

Comparison of the performance of ITS1 and ITS2 as barcodes in amplicon-based sequencing of bioaerosols [10.7717/peerj.8523](https://doi.org/10.7717/peerj.8523)

Assessing airborne fungal communities by high-throughput sequencing using passive traps
10.1128/AEM.02637-17

Prospects and challenges of implementing DNA metabarcoding for high-throughput insect surveillance <https://doi.org/10.1093/gigascience/giz092>

Genome drafts of four phytoplasma strains of the ribosomal group 16SrIII
10.1099/mic.0.061432-0

Comparison of qPCR and Metabarcoding Methods as Tools for the Detection of Airborne Inoculum of Forest Fungal Pathogens <https://doi.org/10.1094/PHYTO-02-20-0034-R>

Virus Detection by High-Throughput Sequencing of Small RNAs: Large-Scale Performance Testing of Sequence Analysis Strategies <https://doi.org/10.1094/PHYTO-02-18-0067-R>

Semi-artificial datasets as a resource for validation of bioinformatics pipelines for plant virus detection
<https://zenodo.org/record/4584673#.YEJn-ZNKinc>

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Resources mentioned during Dr. Adams presentation

Use of next-generation sequencing for the identification and characterization of Maize chlorotic mottle virus and Sugarcane mosaic virus causing maize lethal necrosis in Kenya

<https://doi.org/10.1111/j.1365-3059.2012.02690.x>

Historical virus isolate collections: An invaluable resource connecting plant virology's pre-sequencing and post-sequencing eras

<https://doi.org/10.1111/ppa.13313>

The Biology and Phylogenetics of *Potato virus S* Isolates from the Andean Region of South America

<https://doi.org/10.1094/PDIS-09-17-1414-RE>

First report of *Tomato brown rugose fruit virus* in tomato in the United Kingdom

<http://dx.doi.org/10.5197/j.2044-0588.2019.040.012>

Sequence analysis of 43-year old samples of *Plantago lanceolata* show that *Plantain virus X* is synonymous with *Actinidia virus X* and is widely distributed

<https://doi.org/10.1111/ppa.13310>

Real-time tracking of Tomato brown rugose fruit virus (ToBRFV) outbreaks in the Netherlands using Nextstrain <https://doi.org/10.1371/journal.pone.0234671>

The impact of high throughput sequencing on plant health diagnostics

<https://link.springer.com/article/10.1007/s10658-018-1570-0>

Resources shared by participants

this abstract shows detection of viruses from 90 year old herbarium samples.

<https://agritrop.cirad.fr/594811/>