iSWAB™- Microbiome

A snapshot of the microbiome from point of collection to processing

Microbial content and diversity within collected gut, rectal, vaginal, skin, oral, or soil samples can provide a wealth of clues about human and animal health. However, current microbiome collection methods subject the samples to harsh and stressful stabilization techniques such as freezing or harsh organic solvents. Both stabilization approaches have a high probability of altering the microbial representation in the sample, which could lead to misleading results and hinder proper modeling or data analysis.

1- Freezing: Requires well-monitored cold chain storage and transport - Cost associated with cold chain transport - Alters microbial representation from point of collection to processing - Limited to DNA analysis – Thawing sample requires pre-processing which affects DNA quality – Somewhat limits re-culturing of samples, therefore affecting proper modeling or data analysis.

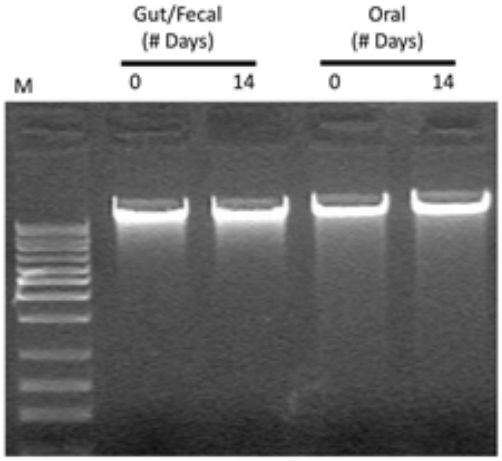
2- Organic solvents: In addition to being toxic and requires strict regulations for transport and handling procedures, they alter microbial representation from the point of collection to processing - Limited to DNA and somewhat for RNA analysis.

Mawi DNA Technologies extends its iSWAB technology into microbiome research. The iSWAB-Microbiome (MB) is a non-toxic stabilizing technology that enables inactivation of bacteria, fungi, spores, and viruses, allows ambient collection and transport of various biosamples, and maintains the status quo at the time of collection. iSWAB-MB provides a representative snapshot of the microbial community that remains unchanged from collection to processing of oral, gut/fecal, skin, vaginal, and soil samples. Purified microbial DNA or RNA isolated from collected samples are compatible with qPCR, microarray, and NGS for microbiome research in health, wellness, and forensics.

Features

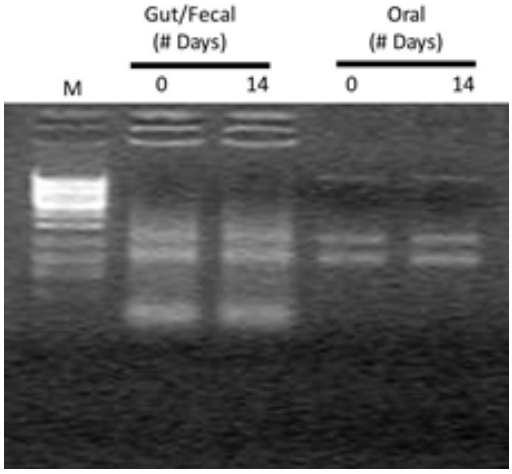
- Non-toxic stabilization; no organic, hazardous solvent fixatives or detergents.
- Microbial presentation maintained intact from time of collection for weeks at room temperature (real time testing ongoing).
- No bloom effect correction needed for microbiome data. Both aerobic and anaerobic bacterial communities stabilized from collection to processing.
- Ambient temperature transport and storage with no cold chain involvement. iSWAB-MB buffer allows the isolation of microbial DNA or RNA with minimal or no human genomic DNA contamination.
- The stabilization buffer efficiently inactivates bacteria, fungi, spores, and viruses allowing safe transport of biological samples.
- Purified bacterial DNA or RNA isolated from collected samples are compatible with qPCR, microarray and NGS based applications.
- Scalable and customizable platform capable of stabilizing up to 20g of fecal or soil material in standard collection containers.

Microbial DNA Profile from iSWAB-Microbiome



Purified microbial DNA from iSWAB-Microbiome oral or gut/fecal pooled samples were normalized to 50 ng of DNA/well and loaded on 1% agarose (M: 1KB DNA ladder)

Microbial RNA Profile from iSWAB-Microbiome



Purified microbial total RNA with RNeasy mini kit from iSWAB-Microbiome oral or gut/fecal pooled samples were normalized to 20 ng/well and analyzed by gel electrophoresis (M: 1KB DNA ladder)

mawi

Biosampling Reinvented™

08/20/21

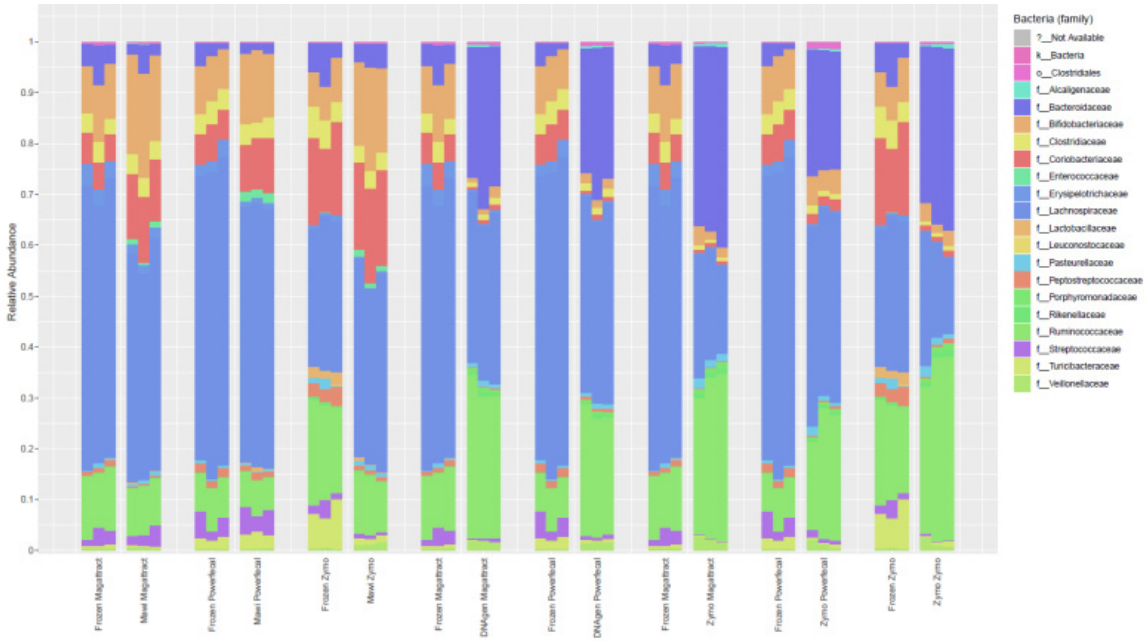
USA/Canada: +1 510-256-5186 / +1 855 DNA-SWAB www.mawidna.com

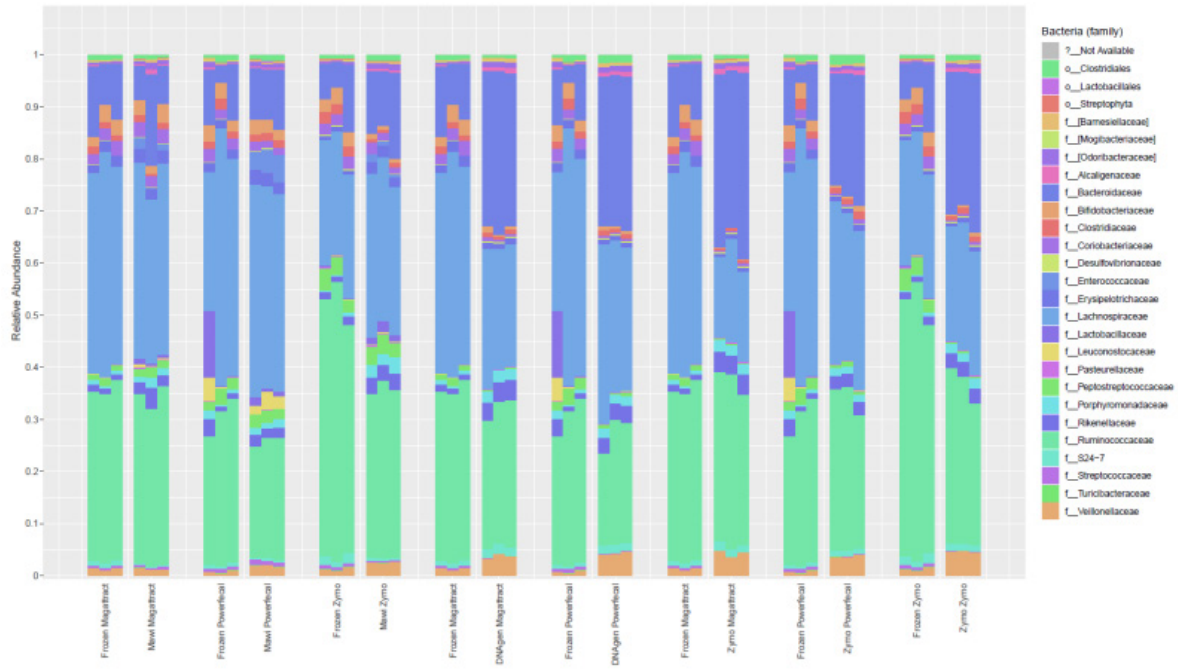
For research use only. Not for use in diagnostic procedures. iSWAB is a trademark of Mawi DNA Technologies LLC. Specifications, terms and pricing are subject to change. Not all products are available in all countries. Please consult your local sales representative for details. © 2016 Mawi DNA Technologies LLC. All rights reserved. v2.1

iSWAB™- Microbiome

A snapshot of the microbiome from point of collection to processing

The Microbial Diversity/Profile of Fecal Samples From Point of Collection to Processing Remains Unaffected with iSWAB-Microbiome and is much more Similar to Frozen Samples than any other available fecal collection method, Regardless of the Extraction Method Used, Part I (customer/third party validated data)





mawi

Biosampling Reinvented™

08/20/21

USA/Canada: +1 510-256-5186 / +1 855 DNA-SWAB

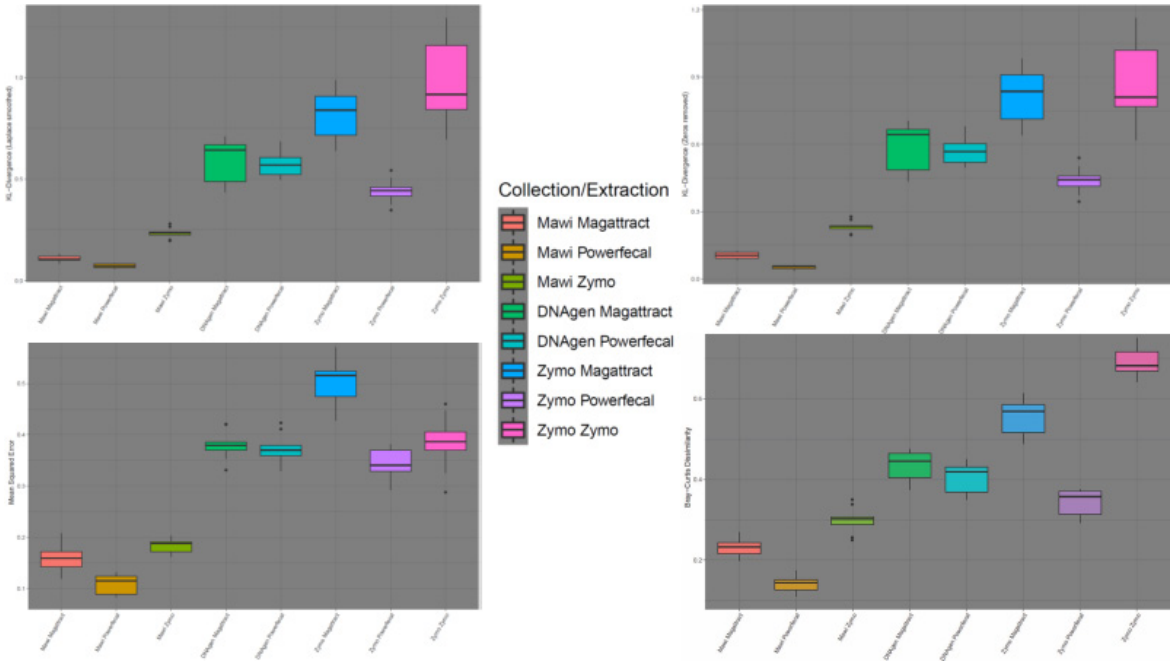
www.mawidna.com

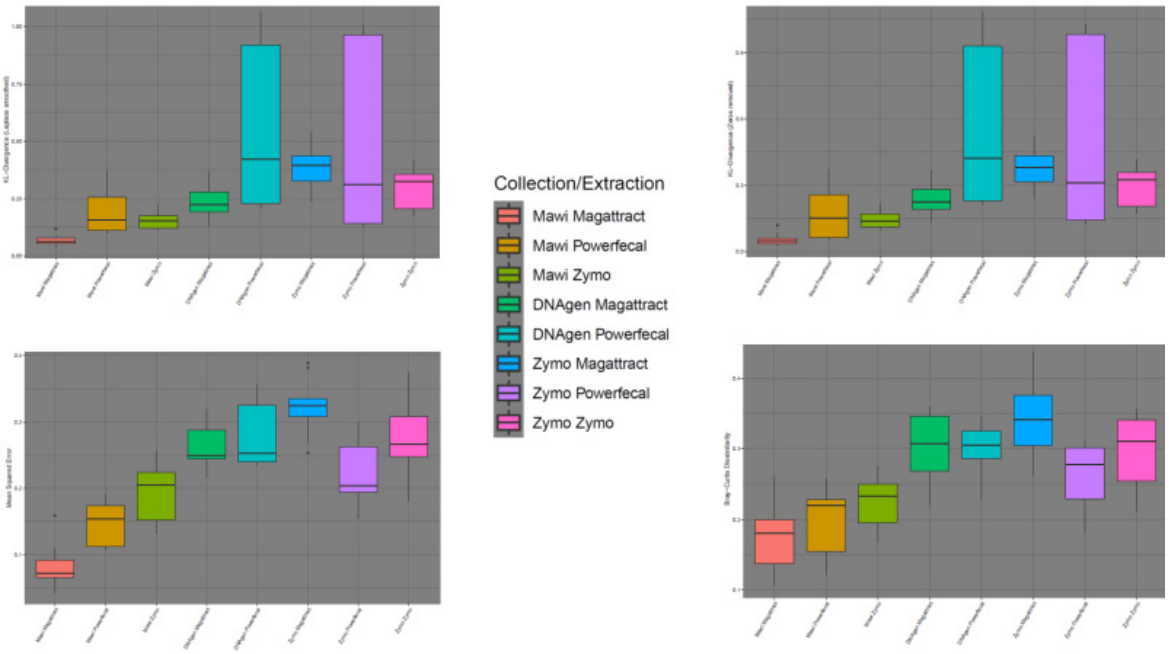
For research use only. Not for use in diagnostic procedures. iSWAB is a trademark of Mawi DNA Technologies LLC. Specifications, terms and pricing are subject to change. Not all products are available in all countries. Please consult your local sales representative for details. © 2016 Mawi DNA Technologies LLC. All rights reserved.

iSWAB - Microbiome

A snapshot of the microbiome from point of collection to processing

The Microbial Diversity/Profile of Fecal Samples From Point of Collection to Processing Remains Unaffected with iSWAB-Microbiome and is much more Similar to Frozen Samples than any other available fecal collection method, Regardless of the Extraction Method Used, Part II (customer/third party validated data)





mawi

Biosampling Reinvented™

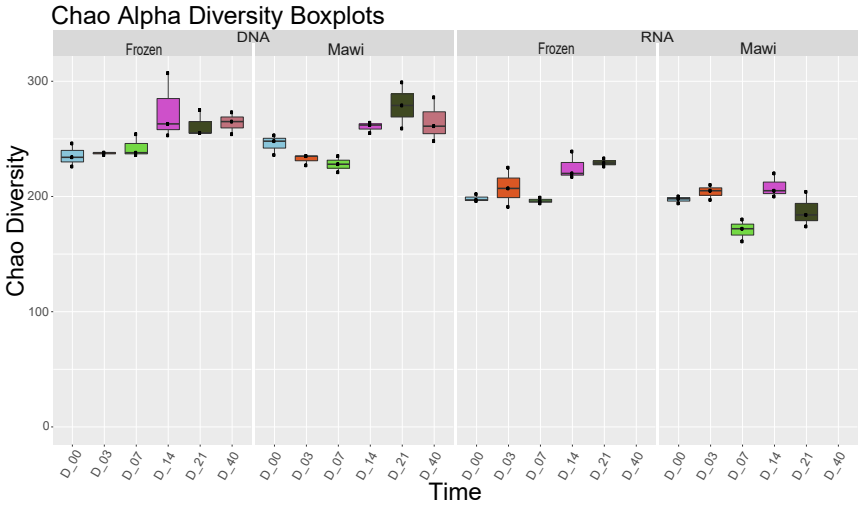
08/20/21

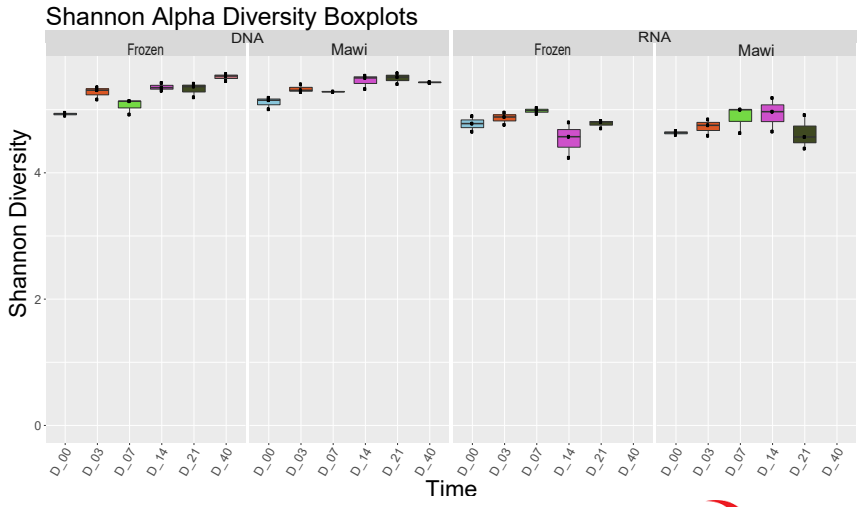
For research use only. Not for use in diagnostic procedures. iSWAB is a trademark of Mawi DNA Technologies LLC. Specifications, terms and pricing are subject to change. Not all products are available in all countries. Please consult your local sales representative for details. © 2016 Mawi DNA Technologies LLC. All rights reserved.

iSWAB - Microbiome

A snapshot of the microbiome from point of collection to processing

16s rRNA Sequencing Analysis of Fecal Microbial DNA & RNA from iSWAB-Microbiome at Room Temperature Storage vs. Frozen Samples for 40 Days





This data was generated using shotgun sequencing platform from COSMOSID® Unlocking The Microbiome

Customization Options

- iSWAB-Microbiome can be customized using larger or smaller collection devices, depending on your sample size requirements.
- Other items which can be customized include IFU and product labeling.
- For more information, please contact sales@mawidna.com.

Part No.	Product	Collection Volume
ISWAB-MB-1200	iSWAB-Microbiome Collection Kit, 1.0mL	1.0mL
ISWAB-MBF-1200	iSWAB-Microbiome Collection Kit (with FecesCatcher), 1.0mL	1.0mL
ISM-T-1200-R	iSWAB-Microbiome Collection Tube Rack, 1.0mL x 50	1.0mL

mawi

Biosampling Reinvented™

08/20/21

For research use only. Not for use in diagnostic procedures. iSWAB is a trademark of Mawi DNA Technologies LLC. Specifications, terms and pricing are subject to change. Not all products are available in all countries. Please consult your local sales representative for details. © 2016 Mawi DNA Technologies LLC. All rights reserved.