



## Smartphone-based DNA detection platform provides speedy on-site results

**B**iomeme, of Philadelphia, PA, has developed what it says is the world's "smallest and most portable DNA detector" which operates via a simple iPhone interface.

According to Biomeme, samples can be prepared for testing using a patented DNA purification process that allows users to extract DNA in minutes.

"What this means is that you no longer have to wait for lab test results to know if a sample is positive for a particular species," says Biomeme.

Biomeme has also enabled the device to automatically upload results to personal Data Portals in real-time. Thus, for fisheries-related work a project manager could coordinate multiple field crews sampling simultaneously and see the species detection results mapped in real-time as crews generate data.

In an aquaculture setting it means that a technician can use a simple, on-site swab test to determine the health of their fish?

Biomeme works with existing species-specific tests (assays) that labs run on benchtop qPCR equipment. For technicians working with a laboratory facility on environmental DNA or fish health diagnostics, those same tests can be ported into the Biomeme platform for field use.

Smith-Root in Washington state sells the Biomeme device and has developed what it describes as an "eDNA sampling backpack," that pairs with the Biomeme device to achieve a complete eDNA sampling and detection system.

*For more information go to:*

*[www.smith-root.com](http://www.smith-root.com) or [www.biomeme.com](http://www.biomeme.com)*