

 SIGN UP FOR FREE NEWSLETTER

EMAIL

[SIGN UP](#)

Join the Conversation

ENN COMMUNITY

—original content
—post your comments

 Stay updated with the ENN RSS feeds

 Find us on: **facebook**

 **twitter**

 **LinkedIn**

ENN MEMBERS

- » [Our Editorial Affiliate Network](#)
- » [Partner Sites](#)

PRODUCTS & SERVICES

- » [Submit a News Release](#)
- » [Be a Part of ENN](#)

ADVERTISE WITH ENN

- » [Why Advertise with ENN](#)
- » [Contact ENN Sales Team](#)

ENN ARCHIVES

- » [News Archive](#)

ABOUT ENN

- » [History](#)
- » [Mission Statement](#)
- » [Our Staff](#)
- » [Editorial Philosophy](#)
- » [Contact ENN](#)
- » [ENN Terms](#)
- » [Fair Use Notice](#)

 [Printer Friendly Version](#)

 [ShareThis](#)

From: American Chemical Society via EurekAlert!
Published March 14, 2016 07:27 AM

Desert cactus purifies contaminated water for aquaculture, drinking and more

Farm-grown fish are an important source of food with significant and worldwide societal and economic benefits, but the fish that come from these recirculating systems can have unpleasant tastes and odors. To clean contaminated water for farmed fish, drinking and other uses, scientists are now turning to an unlikely source -- the mucilage or inner "guts" of cacti.

The researchers present their work today at the 251st National Meeting & Exposition of the American Chemical Society (ACS). ACS, the world's largest scientific society, is holding the meeting here through Thursday. It features more than 12,500 presentations on a wide range of science topics. A brand-new video on the research is available at <http://bit.ly/ACSCactus>.

"We found there is an attraction between the mucilage of cactus and arsenic," says Norma Alcantar, Ph.D. "The mucilage also attracts sediments, bacteria and other contaminants. It captures these substances and forms a large mass or 'floc' that sort of looks like cotton candy. For sediments, the flocs are large and heavy, which precipitate rapidly after the interaction with mucilage."

The technology grew from century-old knowledge that mucilage from some common cacti can clean drinking water. Alcantar was first introduced to this process by her Mexican grandmother who described using boiled prickly pear cactus to capture particles in sediment-laced dirty water. The sediments sank, and the water at the top of the bucket became clear and drinkable.

Continue reading at [EurekAlert!](#)

[Prickly pear cactus image](#) via Shutterstock.

 Like  0  [ShareThis](#)

RELATED ARTICLES

- » [Should we say goodbye to cacti?](#)
December 2, 2015 07:23 AM
- » [Can pollution be good for trees?](#)
June 30, 2015 07:46 AM
- » [Nearly 1/3 of world's cacti species facing extinction](#)
October 12, 2015 08:36 AM
- » [How aging water supply systems can be making us sick](#)
June 8, 2015 07:47 AM



Get the ENN mobile app
iOS Android

FEATURED
AFFILIATE 
ECOREPORT

View all the featured contributing content by this source

 **asianpaints**

ASIAN PAINTS CLASSIQUE
COVERS MORE
THAN 200 SQUARE FEET
WITH A LITRE OF PAINT



 **GREEN**
Monitored Site
VERIFY