

Recycled Glass Research Project

(News Compilation)

This project investigates the use of recycled glass particles as a soil substitute in agriculture to grow vegetables without chemicals. The collaboration between Dr. Julie Vanegas and Dr. Teresa Patricia Feria has generated experiments with potential to transform agricultural practices in the Rio Grande Valley and beyond.

- **Newspaper/Magazine/News:** Articles highlighting the research and its implications for sustainable agriculture.
 - **Video:** Visual material documenting the progress and applications of recycled glass in farming, as well as raising awareness of the project.
 - **Social Media:** Posts showing community interaction and interest around this groundbreaking research.
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Newspaper/Magazine/News



HOME NEWS RELEASES MULTIMEDIA MEETINGS

NEWS RELEASE 21-AUG-2024

Estudio piloto utiliza vidrio reciclado para cultivar los ingredientes para preparar salsa

Reports and Proceedings

AMERICAN CHEMICAL SOCIETY

Estudio piloto utiliza vidrio reciclado para cultivar los ingredientes para preparar salsa. (2024, August 21). EurekAlert! <https://www.eurekalert.org/news-releases/1053690?language=spanish>



ACS
Chemistry for Life®

Press Release
American Chemical Society

PUBLICACIÓN RETENIDA: Miércoles 21 de agosto de 2024, 5 a. m. hora del este

Nota para los periodistas: Informe de que esta investigación se presentará en una reunión de la American Chemical Society.
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Estudio piloto utiliza vidrio reciclado para cultivar los ingredientes para preparar salsa

DENVER, 21 de agosto de 2024 — Los chips de tortilla y la salsa fresca son sabrosos ya de por sí, pero podrían ser aún más atractivos si cultivas los ingredientes de manera sostenible. Los investigadores informan que el cilantro, el pimiento y el jalapeño se pueden cultivar en vidrio reciclado de botellas desechadas y pulverizadas como las de cerveza o refrescos. El estudio piloto reveló que la sustitución parcial de la tierra en una maceta con fragmentos de vidrio reciclados acelera el desarrollo de la planta y reduce el crecimiento de hongos no deseado.

American Chemical Society. (2024). *Estudio piloto utiliza vidrio reciclado para cultivar los ingredientes para preparar salsa.*

<https://www.acs.org/content/dam/acsorg/pressroom/presspacs/2024/082124-glass-soil-spanish.pdf>

MEDIO AMBIENTE

Descubren que sustituir la tierra por vidrio reciclado hace que los cultivos crezcan más rápido

Los investigadores descubren que retienen más agua y evitan el crecimiento de hongos nocivos, en un experimento con plantas de cilantro, jalapeño y pimienta morrón



1 comentario

Colmenero, R. F., & Colmenero, R. F. (2024, August 21). Descubren que sustituir la tierra por vidrio reciclado hace que los cultivos crezcan más rápido.

ELMUNDO. <https://www.elmundo.es/ciencia-y-salud/medio-ambiente/2024/08/21/66c5b3bc21efa08d208b4588.html>

Estudio piloto usa vidrio reciclado para cultivar ingredientes para salsas

Los investigadores presentarán sus resultados en la reunión de otoño de la American Chemical Society (ACS).

La científica en nanomateriales, Julie Vanegas, se unió a la facultad de la Universidad de Texas en el Valle del Río Grande, donde junto con su mentora, Teresa Patricia Fera Arroyo, una ecóloga que trabaja en la resolución de problemas relacionados con la seguridad alimentaria y la sostenibilidad.

Durante sus primeras conversaciones, Vanegas mencionó que había estado evaluando partículas de vidrio reciclado para proyectos de restauración costera, como el cultivo de sauces. Fera se preguntó si el vidrio también podría utilizarse para el cultivo de productos agrícolas. Para responder a esta pregunta, desarrollaron experimentos para cultivar alimentos familiares, de maduración rápida y que se pueden cultivar en huertos caseros o en macetas.

«Estamos intentando reducir los residuos en los vertederos al mismo tiempo que cultivamos vegetales comestibles», dice Andrea Quezada, estudiante de posgrado en química del laboratorio Nanoworld Vanegas, quien está presentando la investigación del equipo en la reunión. «Si esto es viable, podríamos introducir suelos basados en vidrio en las prácticas agrícolas para las personas aquí en el Valle del Río Grande y en todo el país».

EcoInventos, R. (2024, August 22). Nuevo estudio descubre que al sustituir parcialmente la tierra en una maceta por fragmentos de vidrio. *EcoInventos*. <https://ecoinventos.com/estudio-piloto-aumenta-crecimiento-plantas-cilantro-pimientos-jalapenos-usando-una-mezcla-de-vidrio-reciclado/>

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Cómo y por qué poner botellas en tus cultivos

Descubre la razón de por qué ponemos botellas de plástico en los bancales o en el huerto, razones de peso muy interesantes.



Newspaper/Magazine/News

Un estudio piloto utiliza vidrio reciclado para cultivar plantas de salsa

28.08.2024



Un estudio piloto utiliza vidrio reciclado para cultivar plantas de salsa. (n.d.). <https://www.yumda.com/es/noticias/1184295/un-estudio-piloto-utiliza-vidrio-reciclado-para-cultivar-plantas-de-salsa.html>

Pilot study uses recycled glass to grow plants for salsa ingredients

PressPacs | August 21, 2024

FOR IMMEDIATE RELEASE

DENVER, Aug. 21, 2024 — Tortilla chips and fresh salsa are tasty in themselves, but they could be even more appealing if you grow the ingredients in a sustainable way. Researchers report that cilantro, bell pepper and jalapeño can be cultivated in recycled glass from discarded, pulverized bottles like those from beer or soda. The pilot study found that partially substituting soil in a planter with recycled glass fragments speeds up plant development and reduces unwanted fungal growth.

MEDIA CONTACT

ACS Newsroom
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Pilot study uses recycled glass to grow plants for salsa ingredients - American Chemical Society. (n.d.). American Chemical Society. <https://www.acs.org/pressroom/presspacs/2024/august/pilot-study-uses-recycled-glass-to-grow-plants-for-salsa-ingredients.html>

Newspaper/Magazine/News

UTRGV part of a groundbreaking research project that repurposes glass waste, potentially fortify coastlines, and revolutionize ag practices

📅 Wednesday, August 21, 2024
🔗 Research, Science and Technology, Faculty Focus, Alumni

By Amanda A. Taylor-Uchoa

RIO GRANDE VALLEY, TEXAS / NEW ORLEANS, LOUISIANA – AUG. 21, 2024 – Did you know that the glass bottle from your favorite drink could one day help preserve coastlines, or has the potential to grow crops?

From Bottle to Beach: How your last glass drink could be saving coastlines.
(2024, August 21). <https://www.utrgv.edu/newsroom/2024/08/21/groundbreaking-research-project-that-repurposes-glass-waste.htm>

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📷 Multimedia Journalist
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Categories



LOCAL NEWS

UTRGV researchers using glass and sand to grow crops, save beaches

by: [Jorge Vela](#)
Posted: Aug 29, 2024 / 07:51 AM CDT
Updated: Aug 29, 2024 / 10:19 AM CDT



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EDINBURG, Texas ([ValleyCentral](#)) — Researchers at the University of Texas Rio Grande Valley (UTRGV) are in the middle of doing something groundbreaking as they are turning everyday glass waste into a possible innovative solution.



Vela, J. (2024, August 29). KVEO-TV. *KVEO-TV*. <https://www.valleycentral.com/news/local-news/utrgv-researchers-using-glass-and-sand-to-grow-crops-save-beaches/>

Newspaper/Magazine/News



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INNOVATION & TECHNOLOGY

Pilot Study Uses Recycled Glass to Grow Salsa Ingredients, Protect Coastlines

The researchers think adding glass to soil could help prevent wind erosion in coastal regions and ecosystems whose preservation is an increasingly valuable aspect of climate resilience.

Published 2 months ago | About a 5 minute read

Brands, S. (2024b, August 23). *Pilot study uses recycled glass to grow salsa ingredients, Protect coastlines* | *Sustainable brands*. Sustainable Brands. <https://sustainablebrands.com/read/innovation-tech/study-glass-grow-ingredients-protect-coastlines>

Recycled Glass: The Secret Ingredient For Growing Healthier Salsa Vegetables

August 21, 2024 | American Chemical Society



ScienceBlog.com. (2024, August 21). Recycled glass: the secret ingredient for growing healthier salsa vegetables. *ScienceBlog.com*. <https://scienceblog.com/547082/recycled-glass-the-secret-ingredient-for-growing-healthier-salsa-vegetables/>

New Studies

Recycled Glass Accelerates Plant Growth For Salsa Ingredients, Research Finds

Scientists use glass shards to speed up development and reduce fungal growth in growing plants for sustainable farming.

Beavis, L., & Beech, S. (2024, September 30). Researcher cultivates ruby in a ring, pioneering sustainable gemstone growth. *Zenger News*. <https://www.zenger.news/2024/08/25/recycled-glass-accelerates-plant-growth-for-salsa-ingredients-research-finds/>

Food and Water | Sustainability

Crushed glass replaces soil in this innovative approach to sustainable agriculture

by Anthony Lewis | Aug 21, 2024

Pilot study explores how recycled glass is being used to grow salsa ingredients, protect coastlines, and safeguard the future of farming.

Lewis, A. (2024, August 21). *Crushed glass replaces soil in this innovative approach to sustainable agriculture*. Advanced Science News. <https://www.advancedsciencenews.com/crushed-glass-replaces-soil-in-this-innovative-approach-to-sustainable-agriculture/>

Newspaper/Magazine/News

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Pilot study uses recycled glass to grow plants for salsa ingredients

Date: August 21, 2024

Source: American Chemical Society

Summary: Tortilla chips and fresh salsa are tasty, but they could be even more appealing if you grow the ingredients yourself. Now, researchers report that some salsa ingredients -- cilantro, bell pepper and jalapeno -- can be more sustainably cultivated with recycled glass. Their pilot study found that partially substituting soil in a planter with recycled glass fragments speeds up plant development and reduces unwanted fungal growth.

Breaking

this hour

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Pilot study uses recycled glass to grow plants for salsa ingredients. (2024, August 24). ScienceDaily.

<https://www.sciencedaily.com/releases/2024/08/240821124454.htm>

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NEWS

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SCIENCE

Salsa hack: 50% recycled glass mix boosts cilantro, pepper, jalapeño plant growth

Preliminary results suggest that recycled glass not only accelerates plant growth but also prevents fungal growth.

Updated: Aug 21, 2024 04:29 AM EST

ScienceBlog.com. (2024, August 21). Recycled glass: the secret ingredient for growing healthier salsa vegetables. *ScienceBlog.com*.

<https://scienceblog.com/547082/recycled-glass-the-secret-ingredient-for-growing-healthier-salsa-vegetables/>



Scientists use recycled glass to grow plants without fertilizers, pesticides or fungicides

Salsa ingredients could be grown in a more environmentally friendly way by using recycled glass from discarded soda or beer bottles.



JOSHUA SHAVIT Published Sep 2, 2024 1:45 AM PDT

Shavit, J. (2024, September 2). *Scientists use recycled glass to grow plants without fertilizers, pesticides or fungicides*. The Brighter Side of News. <https://www.thebrighterside.news/post/scientists-use-recycled-glass-to-grow-plants-without-fertilizers-pesticides-or-fungicides/>



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Academic Edinburg Radio

Glass used to fight against environmental issues

👤 Victoria Gonzalez ⌚ September 9, 2024 2 min read

Gonzalez, V. (2024, September). *Glass used to fight against environmental issues*. UtrgvRadio.com. <https://utrgvradio.com/index.php/2024/09/09/glass-used-to-fight-against-environmental-issues/>

Newspaper/Magazine/News

HOME SCIENCE TECH TRANSPORT LIFESTYLE BODY & MIND

SCIENCE

For a better plant growth medium, just add ground glass

By Ben Coxworth
August 21, 2024



VIEW 1 IMAGES



Cilantro seedlings grown in a medium consisting of 100% recycled glass particles Andrea Quezada

Coxworth, B. (2024, August 21). For a better plant growth medium, just add ground glass. *New Atlas*. <https://newatlas.com/science/plant-growth-glass-particles/>

Recycled Glass: The Secret Ingredient For Growing Healthier Salsa Vegetables

August 21, 2024 | American Chemical Society

ScienceBlog.com. (2024, August 21). Recycled glass: the secret ingredient for growing healthier salsa vegetables. *ScienceBlog.com*. <https://scienceblog.com/547082/recycled-glass-the-secret-ingredient-for-growing-healthier-salsa-vegetables/>

UTRGV works to prevent spread of vector borne disease in the Valley

June 09, 2024 1:17 PM in News - Local By: Bella Michaels

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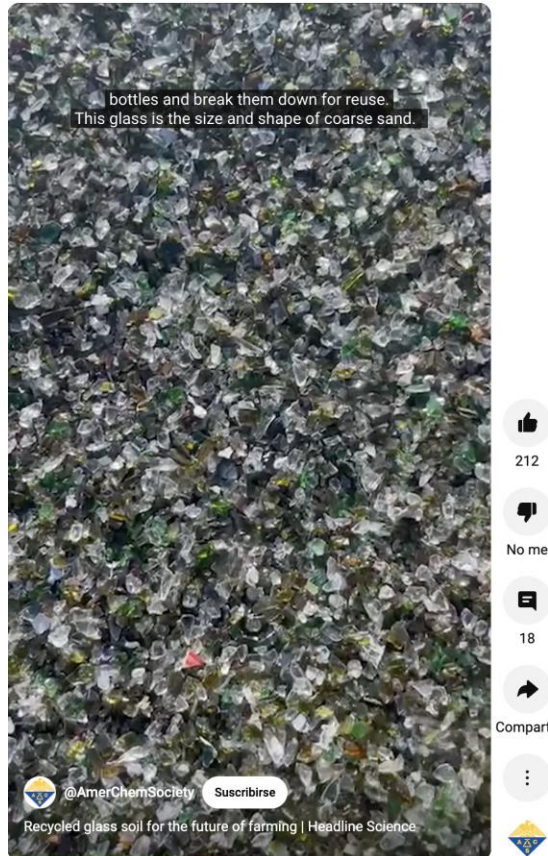
A non-profit group is teaming up with the University of Texas Rio Grande Valley to help prevent the spread of vector borne diseases which spread by insects.

Michaels, B. (2024, June 9). UTRGV works to prevent spread of vector borne disease in the Valley. *KRGV*.
<https://www.krgv.com/news/utrgv-works-to-prevent-spread-of-vector-borne-disease-in-the-valley/>



Telemundo. (2024, August 2). Cambio climático: mitos y realidades. *Telemundo McAllen (40)*.
<https://www.telemundo40.com/especiales/reportajes-especiales/cambio-climatico-mitos-y-realidades/2381215/?amp>

Videos



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<https://youtube.com/shorts/hmNhwP-eL1k?si=gzh8em233qZrZByy>



UTRGV. (2024, October 1). *From bottle to beach: UTRGV's glass waste innovation* [Video]. YouTube.
<https://www.youtube.com/watch?v=RflcwMRdXkc>