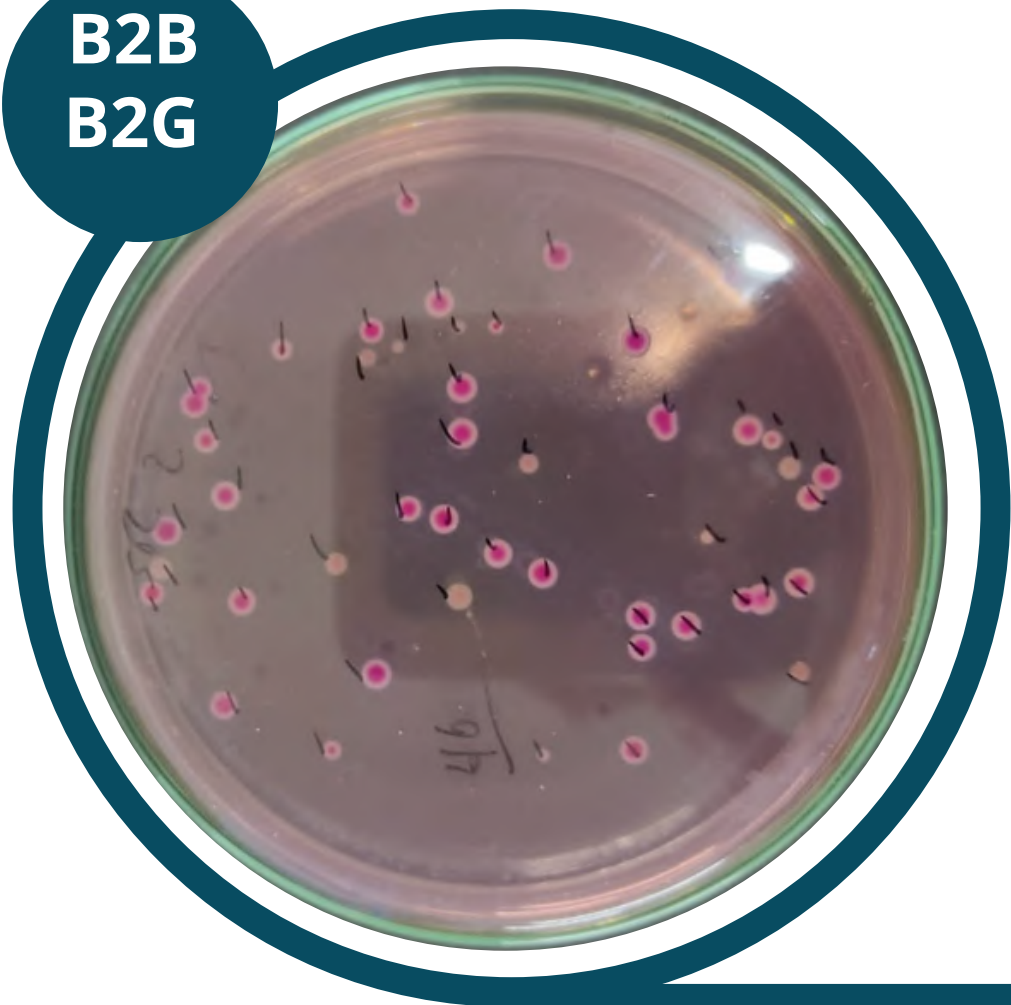


MICROMAX

Microscopic allies in the bioremediation of ASM impacts

B2B
B2G



MicroMax 2.0 is a natural solution that uses 3 strains of the native microbiome to provide mercury biosorption and biomineralization in areas impacted by mining.

At an accessible price point, this microbial consortium has been tested to reduce mercury. It is applied in liquid or via activated carbon.

RESTORATION & REMEDIATION



Madre de Dios, Peru



[Wipa Codesarrollo Socioambiental](#)



2016



4



Carla Merediz
carla.peru@gmail.com

www.micromax-bioremediation.com

Problem

Artisanal and small-scale gold mining (ASGM) releases approximately 6 metric tons of mercury into the environment every day. Gold extraction activities generate deforested and contaminated areas by not properly closing the mine.

Mercury is neurotoxic, and represents a serious threat to human communities, ecosystems and food chains.

Solution

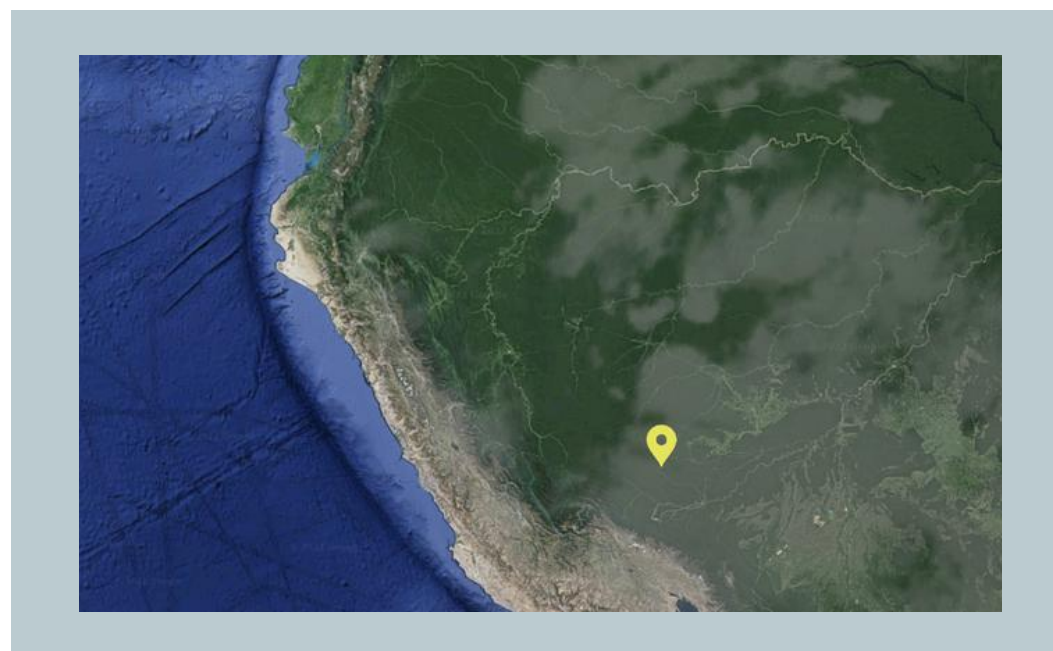
A bioremediation system that uses strains of the local microbiome, with potential for biosorption and biomineralization of mercury to treat and accelerate the recovery of degraded areas. The goal is to reduce the levels of heavy metals in the water and soil at ASM sites.

It is made from the isolation of microorganisms in the field, microbiological culture, genomic analysis, laboratory testing and in vitro scaling of species with biosorption and biomineralization potential.

Market

ASGM miners and organizations: In Peru alone, there are more than 9,000 mining concessions in the process of being formalized and in need of responsible and cost-effective remediation options.

Regional governments responsible for the management and remediation of contaminated public sites.



Micromax is being tested in areas of the San Jacinto native community in Madre de Dios, Peru through its participation in the Amazon CoLab.

Competitive Landscape

Many currently available microbial or other biotech products and solutions are cost prohibitive, must be imported, or introduce additional chemicals.

MicroMax is made from native microorganisms, which have the advantage of being able to successfully re-adapt to the environment at the application site.

Future Development

Investment for brand development, educational marketing and sales capabilities as well as a continuous discovery of customers for the application of the product in various remediation and water treatment applications.

Organization

WIPA Codesarrollo Socioambiental has been developing its experience in the mining situation in Madre de Dios-Peru since 2011 and has been researching biorestorative microorganisms since 2016.

WIPA has partnered with **Bioxlab**, a molecular microbiology laboratory, to strengthen the metagenomics area.



The Artisanal Mining Grand Challenge: The Amazon is implemented by Conservation X Labs in partnership with the United States Agency for International Development (USAID), the Gordon and Betty Moore Foundation, Microsoft, and Esri. The Challenge seeks to advance innovation solutions that make artisanal and small scale mining more environmentally responsible and socially equitable.

www.artisanalminingchallenge.com

Supported by:



CONSERVATION X LABS



Microsoft

