

# THE ONLY REGENERATIVE WATER PH CONTROL SYSTEM

SUITABLE FOR ORGANIC OPERATIONS



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ECO<sub>2</sub>MIX

# WHY CHANGE TO AN ECO<sub>2</sub>MIX PH SYSTEM?

**The only Regenerative, Efficient, Fully Automated, Investment-Free pH Solution**

ECO<sub>2</sub>MIX offers a simple alternative to sulfuric acid or sulfur burners for pH control, using carbonic acid to reduce water pH naturally.

**ECO<sub>2</sub>MIX Water = Rainwater (H<sub>2</sub>O + CO<sub>2</sub>)**

We simplify pH control and enhance soil health by improving nutrient uptake and water infiltration, aligning farming practices with nature's processes.

## Effects of pH Treatment on Soil Health

### Sulfuric Acid

- ✔ Creates unfavorable conditions for soil organisms.
- ✔ Promotes soil hyper-acidification.
- ✔ Increases soil EC in sodic soils.
- ✔ Reduces water infiltration by breaking soil aggregates.
- ✔ Possibly increases Fe and Al toxicity.



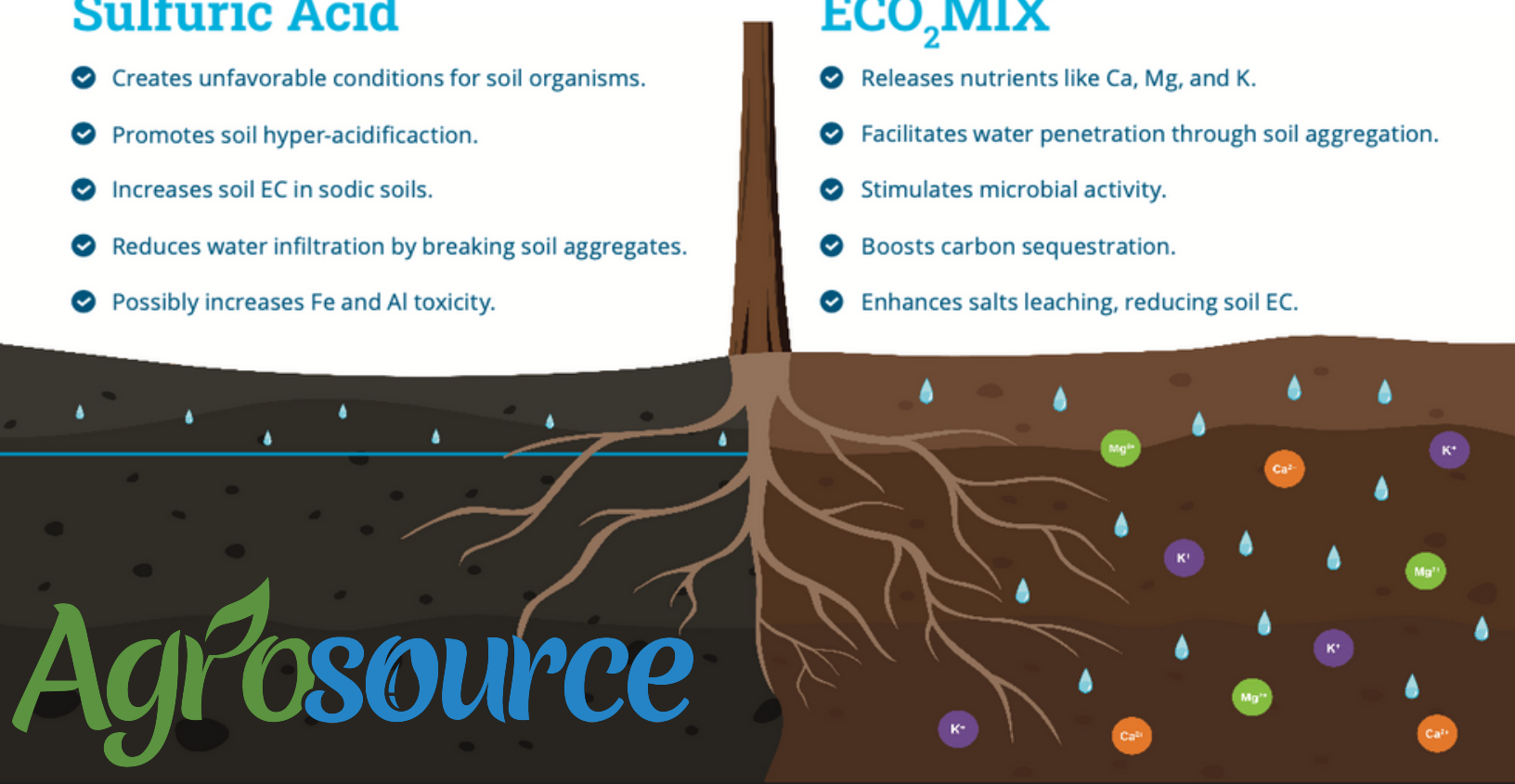
### It's safer

Sulfuric acid poses serious health risks, being corrosive to human tissues including lungs, skin, and eyes, and can cause immediate, potentially irreversible damage. It also risks hyper-acidifying soil, harming plants and soil microbiomes.

In contrast, carbonic acid (H<sub>2</sub>CO<sub>3</sub>) forms naturally when carbon dioxide dissolves in water. It's safer, like using rainwater to adjust the water pH.

### ECO<sub>2</sub>MIX

- ✔ Releases nutrients like Ca, Mg, and K.
- ✔ Facilitates water penetration through soil aggregation.
- ✔ Stimulates microbial activity.
- ✔ Boosts carbon sequestration.
- ✔ Enhances salts leaching, reducing soil EC.



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# It's a more cost-effective option

We supply the necessary equipment and manage the supply of carbon dioxide, with **no investment**. Maintenance and service are included in the annual cost.

Sulfuric acid needs to be handled by trained employees with proper protective equipment, failures and accidents are plentiful in these systems with expensive maintenance costs and potential liabilities. ECO<sub>2</sub>MIX delivers and stores liquid carbon dioxide on-site while using highly-rated safety equipment.

## What is Glomalin? (soil glue)

Glomalin was identified at USDA in the early 1990s on hyphae (hair-like projections) of arbuscular mycorrhizal fungi (AMF).

- ✓ Protects hyphae from nutrient loss.
- ✓ Glues and stabilizes soil aggregates.
- ✓ Reduces wind and water erosion.
- ✓ Enhances water infiltration.
- ✓ Improves nutrient cycling.
- ✓ Increases water retention near plant roots.
- ✓ Facilitates root penetration by reducing soil compaction.
- ✓ Contributes to soil carbon and nitrogen storage.

Carbonic acid-treated water has been shown to increase water infiltration, aggregate the soil, and improve Glomalin in the soil.



## Increase the quality of your soil

**NPK Cycling:** Soil microbiology is the real player in nutrient cycling in the soil, releasing the essential nutrients for the plant.

**Carbon Sequestration:** Soil microbiology helps with carbon sequestration and organic matter release.

**Bio Sustainability:** Carbonic acid-treated water has been shown to increase plant resistance to drought and pests, resilience, biocontrol, and microbial biodiversity.

BENEFITS	ECO <sub>2</sub> MIX	SULFURIC ACID	SULFUR BURNERS
Increases glomalin	✓	✗	✗
Provides carbon to the soil	✓	✗	✗
Improves water pH	✓	✓	✓
Prevents scale formation	✓	✓	✓
Regenerative and sustainable	✓	✗	✗
Easily automated	✓	✗	✗
Improves bacteria/fungi ratio	✓	✗	✗
Investment cost.	\$0	\$15K+	\$40K+