

## SOURCE OF POLLUTION

A long-term multi-metal contaminated site due to ancient (3000-200 B.C.) and more recent (1864-1982 A.D.) mining and metallurgical activities, primarily of Ag and Pb ores.



**Lavreotiki, Greece**

## TRIAL CROPS



**SORGHUM**



**HEMP**



**MISCANTHUS**

## TREATMENTS APPLIED

- Control
- Mycorrhizal fungi
- Fulvic/humic acids X mycorrhizal fungi

All three crops could tolerate elevated soil pollution to a certain extent. However, their growth and yields were smaller than usual.

### SUMMARY

Hemp concentrated more Ni, Cu, Pb, and Sb in the aerial biomass, while sorghum concentrated more Cd and Zn.

Miscanthus concentrated the metals in the following order: Zn > Pb > Cu > Sb > Cd > Ni

### RESULTS

For hemp, the higher yields were observed in the control plots, indicating that the applied treatments did not effectively impact this crop

For sorghum and miscanthus, the highest yields were measured in the plots treated with a combination of mycorrhiza and fulvic/humic acids

In the second year the yields were higher than in the first year

The yields did not differ significantly among treatments, apart from hemp in 2023

