



Sargassum as a Fertilizer for Plants

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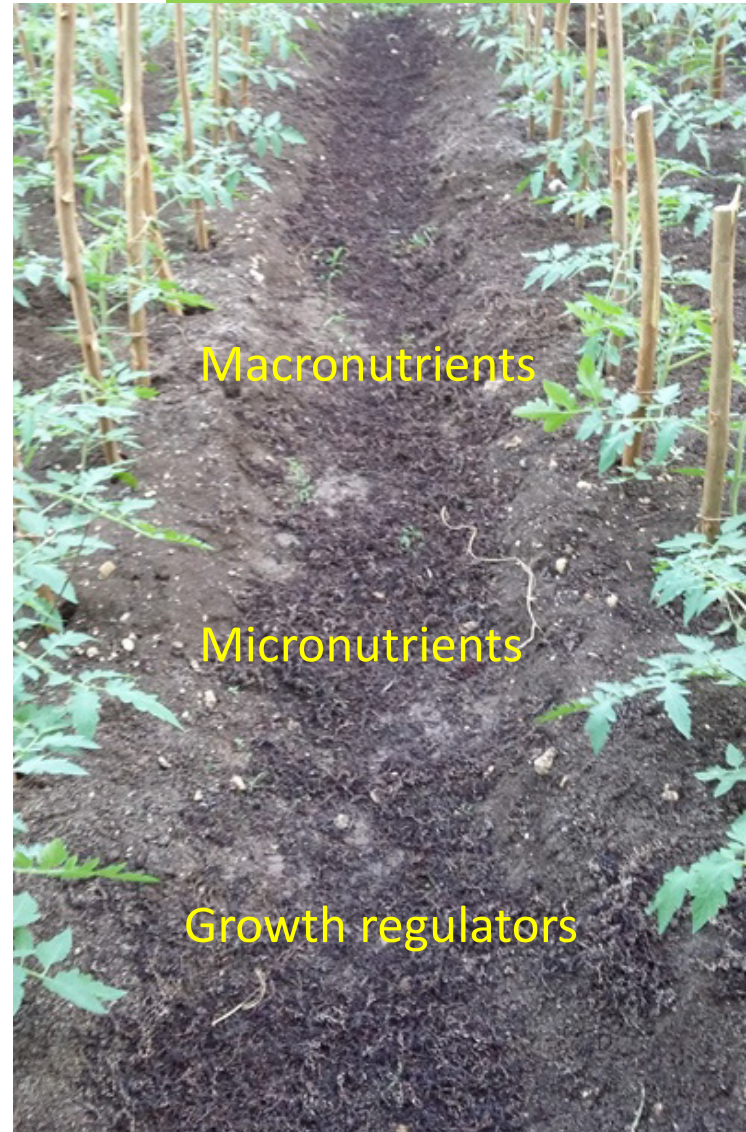
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Sargassum Seaweed

Problem



Resource



How can we add to our soils?

Mulches



Soil mixes and composts



Extracts



<http://www.reddiamondcompost.com/>

Research Aim: Generate evidence for use of Sargassum as Fertilizer



- Small field plots: Investigate effects of temporary exposure to fresh Sargassum mulch
- Potted plants: Determine effects of mulch decomposition stage (age)
- Potted plants: Effects of 3-months old Sargassum mulch
- Potted plants: Examine possible interactive effects of:
 - Mulch and inorganic fertilizer
 - Extract and inorganic fertilizer





Conclusions

- Fresh Sargassum seaweed mulch (washed or unwashed) can lead to soil salinization
- Soil moisture content, soil biological activity and plant growth were enhanced by Sargassum mulch
- The 3-months-old mulch performed best compared to fresh or 8-month-old Sargassum
- Plant tissue moisture content was increased by Sargassum mulch over that of an inert mulch
- Sargassum mulch & biostimulants can potentially reduce the need for inorganic fertilizers

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