

# Module 02.02: Benefits of Compost – Build Soil Structure

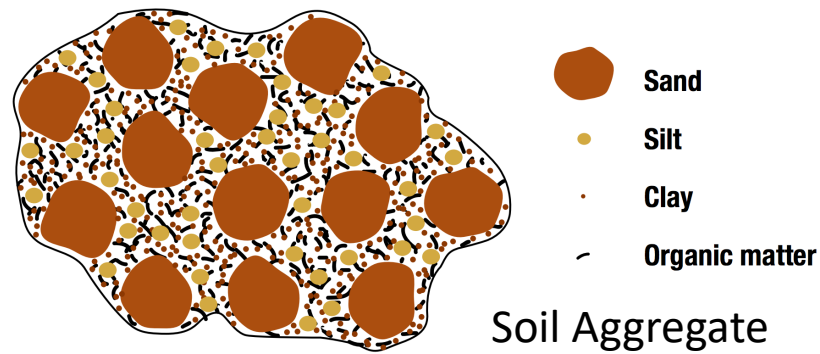


LSU AgCenter Home Composting Certificate Course

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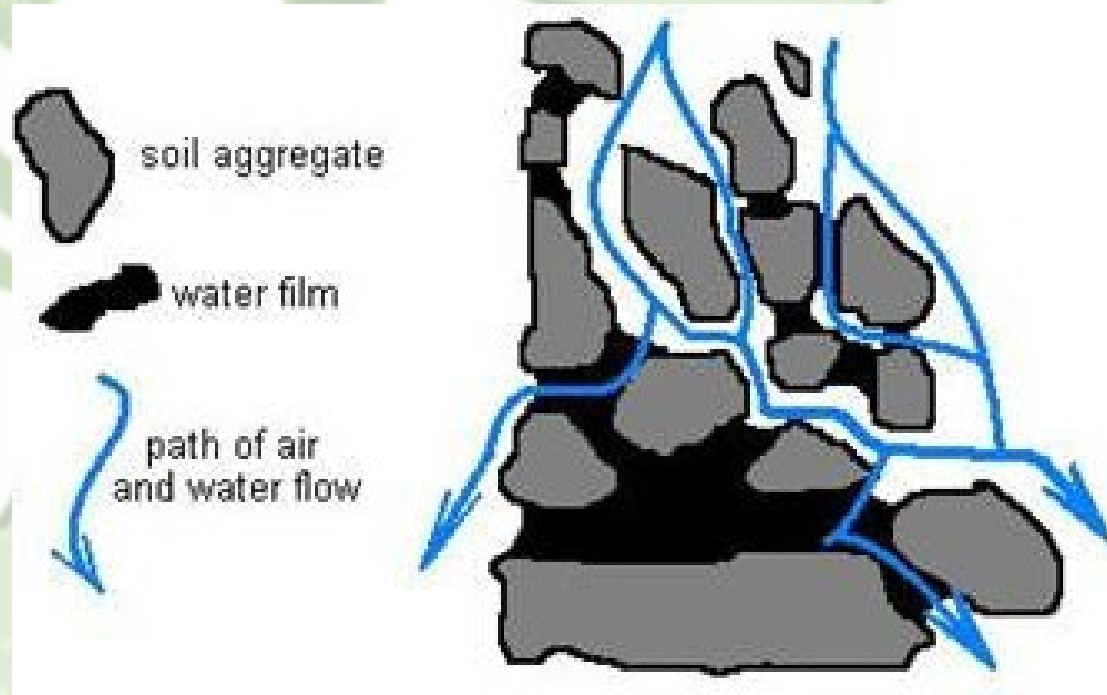


**Soil Structure** is the grouping and binding of the individual soil particles into aggregates of different sizes and shapes.



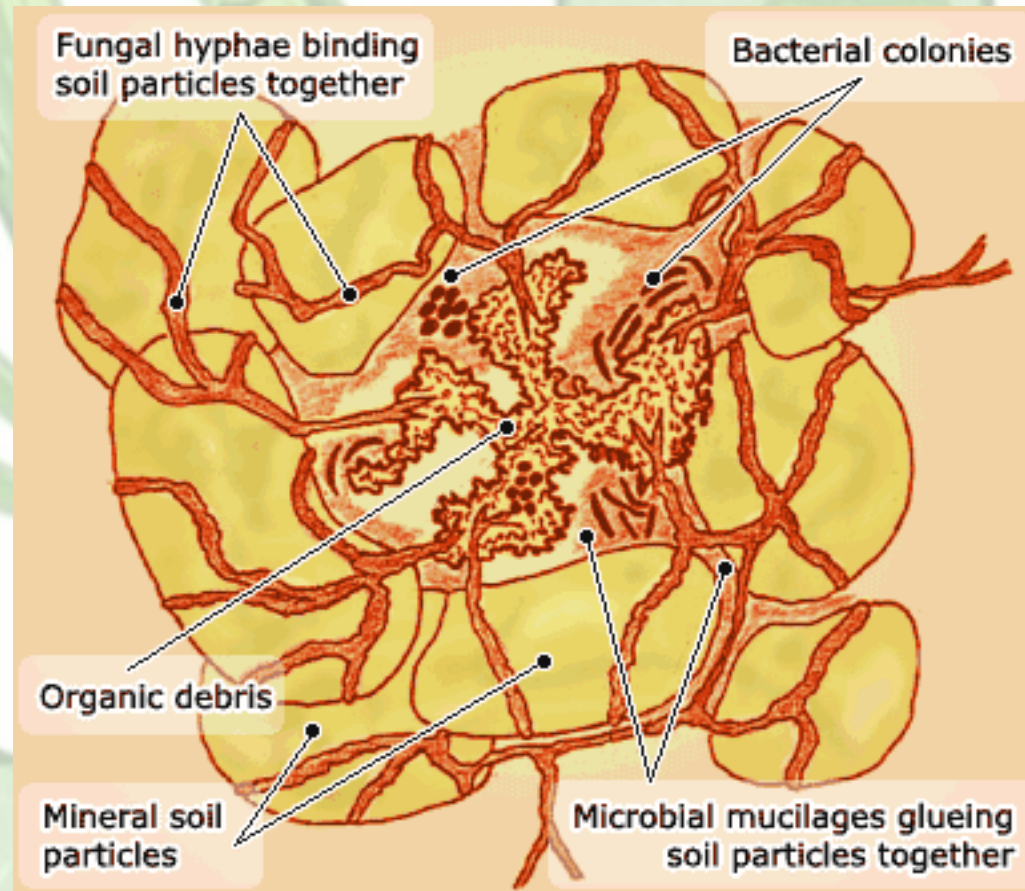


- The size and shape of aggregates give soil its characteristic soil structure.
- Soil structure influences plant growth by affecting the movement of water, air and nutrients to plants.
- The amount of soil pores and the pore size determine the drainage capacity of the soil.



# How does compost affect soil aggregation?

- The hyphae of soil fungi, growing on the compost, bind soil particles together into aggregates.





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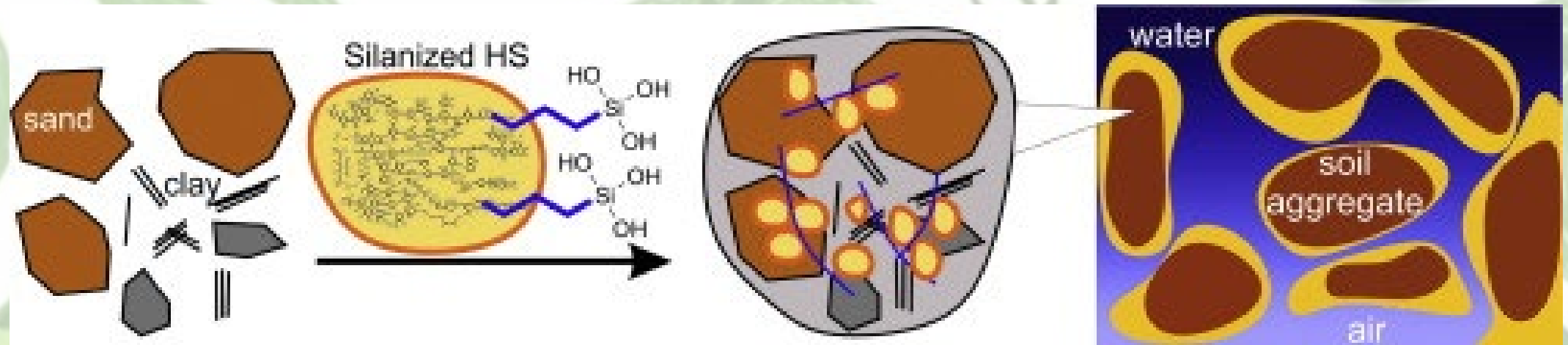
- When worms feed on the organic compost, they ingest soil particles along with the organic matter. Intestinal microorganisms inside the worm gut produce glues that bind the particles together into stable aggregates - worm castings.





# How does compost affect soil aggregation?

- Humic and Fulvic acids are the final degradation products of the natural decay of plant and animal materials. In the presence of some minerals, such as calcium, silicon and iron, a humate salt is formed that electrostatically binds soil particles together. These are the most stable aggregates.





Please post all your questions and results to the message board .