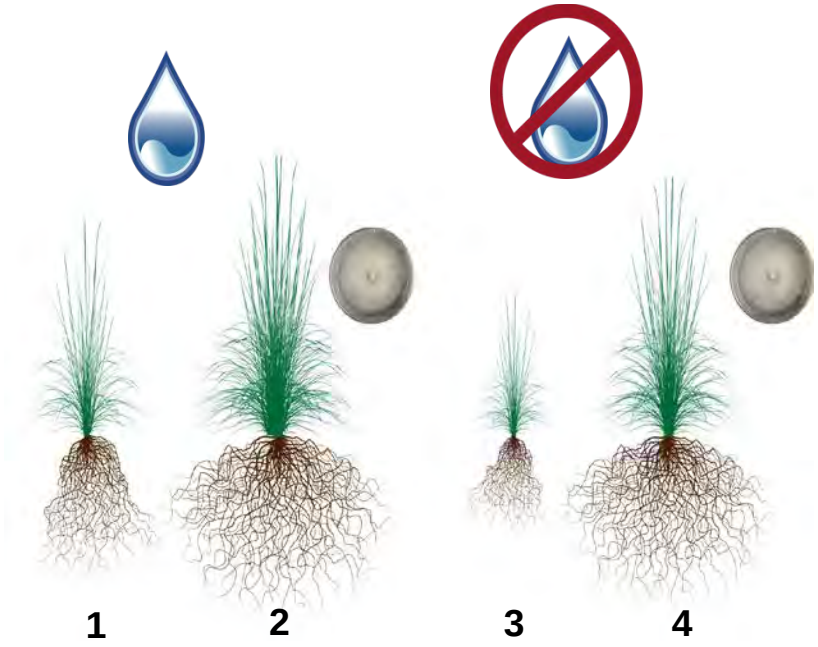
# Mycorrhizae inoculation increases switchgrass biomass under drought

- **Drought is one of the most important abiotic constraints of plant biomass production worldwide.**
- **Symbiotic microbes provide several benefits to host plants including drought tolerance.**
- **BESC researchers conducted greenhouse studies and discovered that colonization of switchgrass roots by the fungus *Sebacina vermifera* increased biomass yield by 258% with normal watering and 132% under severe drought.**
- **Colonized plants subjected to severe drought (4, at right) produced 173% more biomass than well-watered uninoculated control plants (1, at right).**
- **Symbiotic microbes hold great potential for bioenergy crop production, or any agronomic crop, grown under a low-input regime.**




**Normally watered plants without fungus (1) and with fungus (2); drought exposed plant without fungus (3) and with fungus (4).**

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Ghimire SR and Craven KD., "The mycorrhizal fungus *Sebacina vermifera*, enhances biomass production of switchgrass (*Panicum virgatum* L.) under drought conditions", *Applied and Environmental Microbiology*, 2:1-2 (51-58), 2009. doi: 10.1007/s12155-009-9033-2