

The Soil Food Web Gardening Rules

1. Some plants prefer soils dominated by fungi; others prefer soils dominated by bacteria.
2. Most vegetables, annuals, and grasses prefer their nitrogen in nitrate form and do best in bacterially dominated soils.
3. Most trees, shrubs, and perennials prefer their nitrogen in ammonium form and do best in fungally dominated soils.
4. Compost can be used to inoculate beneficial microbes and life into soils around your yard and introduce, maintain, or alter the soil food web in a particular area.
5. Adding compost and its soil food web to the surface of the soil will inoculate the soil with the same soil food web.
6. Aged, brown organic materials support fungi; fresh green organic materials support bacteria.
7. Mulch laid on the surface tends to support fungi; mulch worked into the soil tends to support bacteria.
8. If you wet and grind mulch thoroughly, it speeds up bacterial colonization.
9. Coarse, dryer mulches support fungal activity.
10. Sugars help bacteria multiply and grow; kelp, humic and fulvic acids, and phosphate rock dusts help fungi grow.
11. By choosing the compost you begin with and what nutrients you add to it, you can make teas that are heavily fungal, bacterially dominated or balanced.
12. Compost teas are very sensitive to chlorine and preservatives in the brewing water and ingredients.
13. Applications of synthetic fertilizers kill off most or all of the soil food web microbes.
14. Stay away from additives that have high NPK numbers.
15. Follow any chemical spraying or soil drenching with an application of compost tea.
16. Most conifers and hardwood trees (birch, oak, beech, hickory) form micorrhizae with ectomycorrhizal fungi.
17. Most vegetables, annuals, grasses, shrubs, softwood trees, and perennials form mycorrhizae with endomycorrhizal fungi.
18. Rototilling and excessive soil disturbance destroy or severely damage the soil food web.
19. Always mix endomycorrhizal fungi with the seeds of annuals and vegetables at planting time or apply them to roots at transplanting.