

EVALUATING THE EFFECT OF MICROCLOVER BLACK BEAUTY AS A SEMI-PERMANENT COVER CROP AND LIVING MULCH ON ORGANIC TOMATO PRODUCTION

2019 Northeast Sustainable Agriculture Research & Education (NESARE) Farmer Grant

Like all legumes, Microclover converts atmospheric nitrogen into plant-available forms of nitrogen, naturally fertilizing itself and plants around it.

This experiment tests the effects of Microclover Black Beauty sod on organic tomato production in comparing 3 treatments, repeated 3 times in a randomized 9x9 grid.



Green Manure: 5-inch rows are strip-tilled directly into established sod, green manuring the sod in rows and leaving 4 ft of the legume/grass mix as a living mulch.



Strip: 5-inch rows of sod are completely removed, leaving 4 ft of the legume/grass mix as a living mulch.



Bare Ground: Sod is removed from the entire area, leaving the soil bare, without green manure or living mulch.

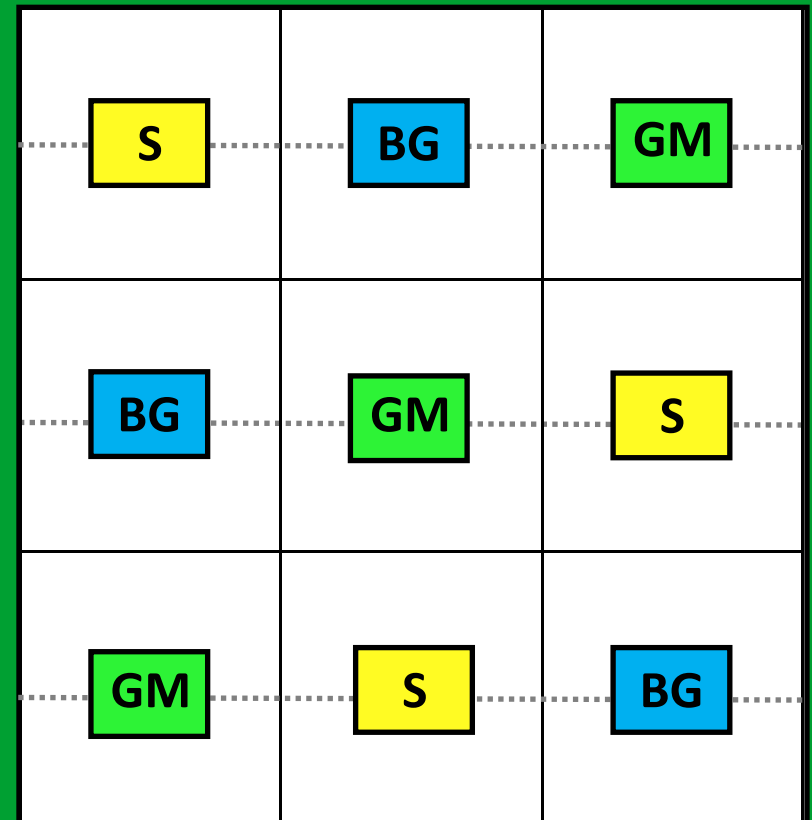
Each quadrant is divided into two fertilizer treatments:

A

A: 50% of organic fertilizer recommended by the New England Vegetable Management Guide (70 lbs/acre).

B

B: 25% of organic fertilizer recommended by the New England Vegetable Management Guide (35 lbs/acre).



All rows are watered by drip irrigation and mulched with organically managed Microclover Black Beauty grass clippings collected from our fields.

