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Cover Crops & High Tunnels

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There's new research out from the American Society for Horticultural Science on the efficacy of overwintered crops as a soil management tool in high tunnels. The study is in response to issues related to depleting nutrients in high tunnel soils over time, and over the course of two years, researchers in Minnesota tested different winter cover crops to improve soil health.

The study was conducted from August 2015 to September 2017 on three sites in Minnesota using: 1) red clover monoculture; 2) winter pea/rye bicultural; 3) hairy vetch/tillage radish/rye; and 4) a bare-ground weeded control.

"Researchers sought to identify productive winter cover crop mixtures in cold-climate high-tunnel environments to quantify the effects of overwintered cover crops on soil health, and to assess the impacts of overwintered cover crops on cash crop productivity—in this case bell peppers," reads the summary.

The study found overwintered cover crops in high tunnels may be an organic alternative to reduce dependence on compost and manure for nitrogen and replenish organic soil matter. You can read the full results in the February 2022 issue of HortScience at journals.ashs.org. **IG**