

Reduce Costs and Increase Yield

AG PRODUCERS CAN NOW HARVEST THE BENEFITS OF INNOVATIVE SOIL-STEAMING TECHNOLOGY AT A COMMERCIAL SCALE

While steaming has been a proven and effective method for soil disinfection, the lack of appropriate equipment has made it economically unfeasible for large, commercial-scale farms. A revolutionary new, propane-powered Soil Steamer changes that by significantly reducing weed seedling emergence on raised beds while maximizing potential yield of high-value crops without chemicals – ultimately growing healthier food for families.

MORE CONTROL, MORE GROWTH, MORE PROFITS

The Soil Steamer's banded steam design is customized to each ag producer's specific crop needs. The result is a targeted application of steam disinfection that avoids costly soil-applied fumigants and herbicides, cutting weeding labor costs in half. And the soil treated by the Soil Steamer requires shorter intervals of crop rotation, allowing for more frequent planting of higher-profit fruits and vegetables.

THE SOIL STEAMER *REDUCES*:

- Weed density
- Soilborne pathogens and nematodes
- Hand-weeding labor costs
- Impact of lettuce drop
- Costs, limitations and harm of pesticides

THE SOIL STEAMER *INCREASES*:

- Yields by controlling disease pressure
- Net income of many vegetable crops
- Crop rotation
- Diameter size of lettuce and carrot crops



Learn more about how this new technology can benefit your ag operations at propane.com/SoilSteamer

A Solution That Improves Harvests and Grows Savings

An essential part of agriculture cultivation is the elimination of weeds, pests and soilborne pathogens. While weeds compete with vegetables for nutrients, certain pests can render crops unmarketable. Furthermore, specific weeds and nematodes pose significant threats to crop yield. Using the propane-powered Soil Steamer before planting crops can significantly improve harvests without the use of pesticides.

80%

WEED CONTROL

provided by the Soil Steamer for both conventional and organic crops

HOW IT WORKS



1 Before planting, the Soil Steamer injects steam along the intended seed rows using continuously moving banded applicators. To lower energy consumption and costs, these applicators are designed for shallow steaming, applying steam to only the necessary area – the top 1-2 inches of soil where weed seeds tend to germinate.



2 The continuously injected steam heats the soil to 150-160°F for 15-20 minutes. Lettuce and other vegetables can be seeded or transplanted into the treated band within a few hours – with steam treatment increasing lettuce yield by 25% where lettuce drop was present.



3 Recent studies show that steam effectively manages 90-95% of annual weeds such as purslane, pigweed and shepherd's purse, resulting in a 73% reduction in weeding time compared to the standard herbicide. In addition, steam suppresses fusarium and controls pythium, lettuce drop, nematodes and verticillium.

Steam soil disinfestation is the only weed control treatment used in organic systems that can be performed today and seeded tomorrow.

INTERESTED IN LEARNING MORE?

Visit propane.com/SoilSteamer for additional details on the benefits of soil steaming.

