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TEMP-AIR

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Disinfecting Stock Trailers

Case Study (pork industry)

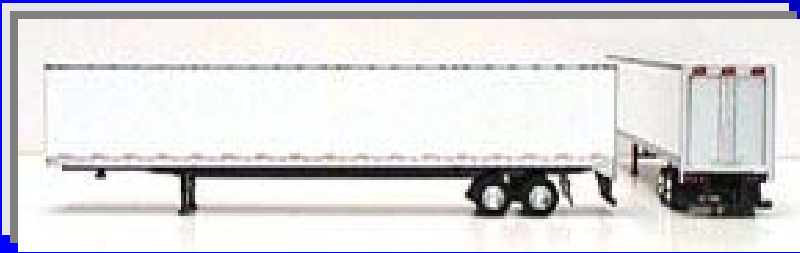
➤ 2002 tests

➤ Times

➤ Results

- Because of positive results the company went forth with a purchase installation of equipment to heat two wash bays that are currently used as heat chambers to disinfect their entire fleet of trailers.
- The equipment is treating 18 to 20 trailers per day, with one operator in a automated control center.

TRAILER HEAT TREATMENT



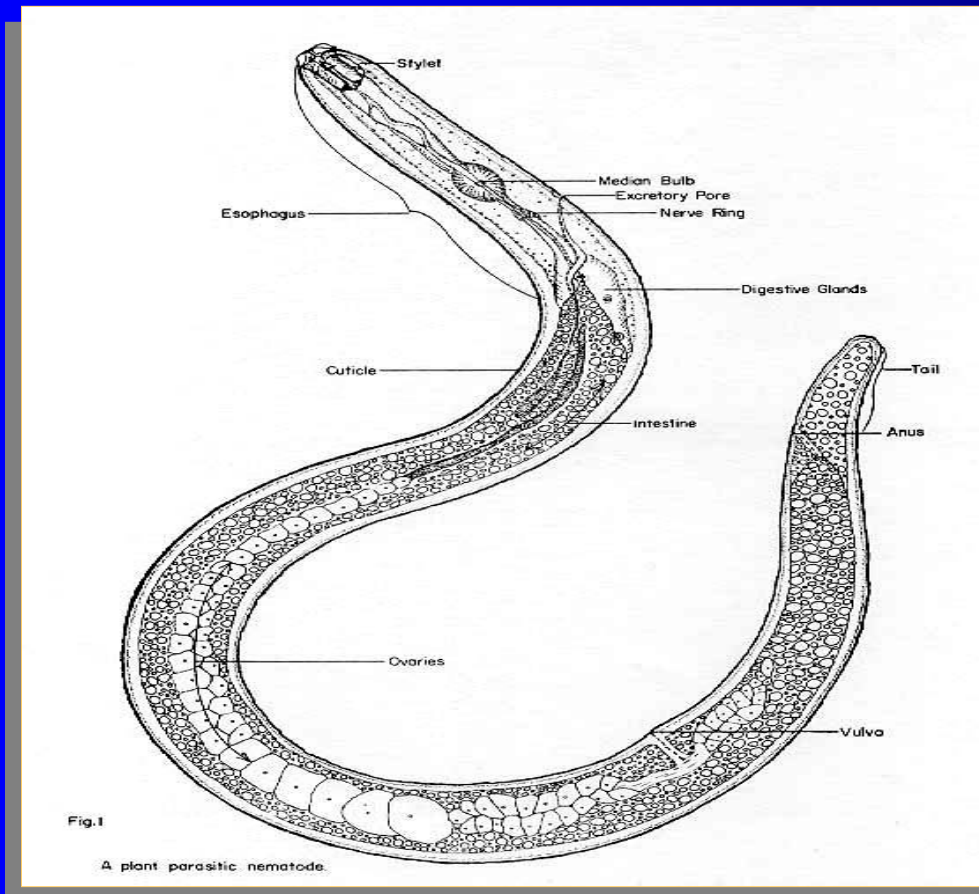
- Temperatures lethal to all pest in trailers are 120°F for two to four hours
- Temperatures lethal to vegetative viruses and bacteria (salmonella, e-coli) are 165°F for 10 minutes
- Fumigation is a dangerous option and trailers are sealed up for 8 to 16 hours
- No license is required to apply heat, unlike chemicals
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- Patented process of positive pressure penetrates deep into all cracks and crevices in trailers types

Heat Treatment for Wood Pallets and Packaging



Nematodes

- The reason wood packaging that is shipped out of country has to be **Heat Treated**



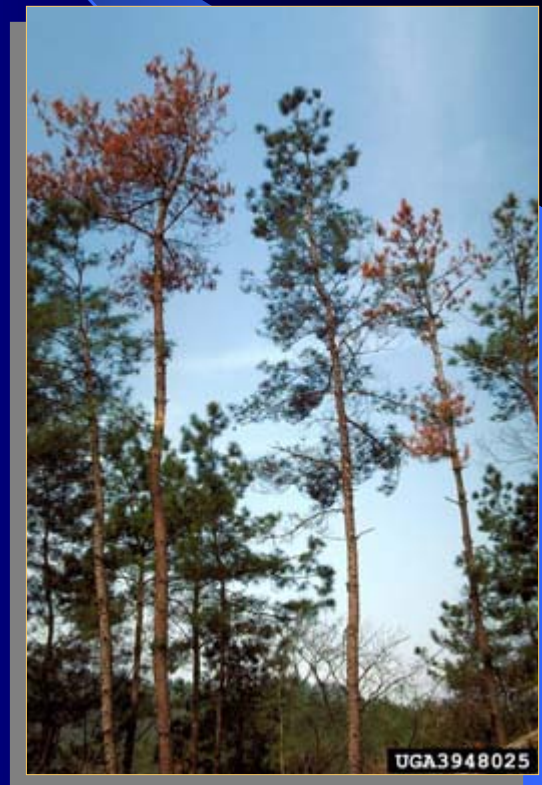
Asian longhorn Beetle / Sawyer Beetle



- This beetle is a known vector for the pine wood nematode

Damage to Trees Caused by Pine Wood Nematodes

- Damage is known as pine or tree wilt that will kill large sections of forest



Basic Heater Set for a Container or Trailer



Chambers

- There are a variety of heat systems that are suitable for every type of application.
- Temp-Air has one application that heats 300 pallets in 3 to 5 hours and another that treats 1900 pallets in 5 to 6 hours.

Standard Chambers 40' to 53' Trailers



Standard Chamber 40' to 53' Hi-Cube ISO container



Custom Chamber 65'x 20'x 20'





Heat Treatment for Wood Pallets and Packaging

- Required Heat Treated temperature is 56C or 133F for 30 minutes at the core of the thickest part of the packaging material.
- H/T (Heat Treated) is required for all softwoods and effective January 2004 will also include all hardwoods.

Blowers

- Are used to move air evenly over all wood products
- Constructed of stainless steel and epoxy finishes
- Moves air at 6,000 to 8,500 feet per minute



Temp-Air & Precision Environmental

Precision Environmental holds many patents on heat treatment for:

- ✓ Mold
- ✓ Bacteria
- ✓ Viruses

Questions?



TEMPAIR®

Thank You