



# Polyphagous Shot Hole Borer + Fusarium Dieback How to Handle Infested Plant Material

## CURRENT OPTIONS

Options for handling infested plant material include the following:

- Chip (less than 1") + compost
- Chip (less than 1") + solarize
- Cut logs + solarize
- Chip (less than 1") + deliver to landfill for use as Alternative Daily Coverage
- Cut logs + kiln-dry

Guidelines for effective solarization and composting are included below.

**\*\*If relocating infested material, cover it in-transit to prevent beetles from escaping\*\***

## SOLARIZATION GUIDELINES

Solarization is a suitable method for handling either infested chips or logs. When done properly, solar energy will heat plant material until both the beetle and fungi are killed. It is most effective during the peak of summer, when temperatures are higher and days are longer, but may be used during the rest of the year as long as time and space can be committed.

Follow these tips for proper solarization:

- Use sturdy plastic sheeting/tarp (clear is recommended) that can withstand rain/wind
- Fully contain chips/logs by wrapping plastic both underneath and over the material
- During July - August: cover chips/logs with sturdy plastic for **at least 6 weeks**
- During September - June: cover chips/logs with sturdy plastic for **at least 6 months**
- **Keep log/chip layers as thin as possible** (2 logs deep maximum) to ensure even heating throughout the pile



## WHY COMPOST?

When done correctly, composting can effectively control the plant pathogens that cause Fusarium Dieback. Composted, chipped plant material may then be repurposed as mulch or added back into soil to improve texture and water retention.

## TRUSTED COMPOST FACILITIES

It is **recommended** that chipped, infested plant material be taken to a composting facility that has earned the US Composting Council's Seal of Testing Assurance (STA). Compost facilities in the STA program are tested to ensure proper decomposition and pathogen control is achieved.

Find your local STA Compost Facility at:  
[compostingcouncil.org/participants](http://compostingcouncil.org/participants)

## PSHB ONLINE

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## COMPOST DIY

If transporting chipped material is not an option, you can compost chips yourself. These general composting guidelines will help assure the destruction of pathogenic fungi.

### Requirements for adequate decomposition

- Woody material should be chipped to less than 1 inch.
- A mixture of equal volumes of green plant and dry plant material will normally achieve a proper carbon-to-nitrogen ratio of 30 to 1.
- Do not add soil, ashes from a stove or fireplace, milk or meat products, or manure from meat-eating animals.
- A pile should be in bins at least 36 x 36 x 36 inches to assure adequate heating. Maintain a temperature of 160°F, turn the pile every 1-2 days, and add nothing to it once the composting process has begun. If temperatures do not get up to 160°F within 1-2 days, the pile is too wet or dry. If too dry, add water. If not enough nitrogen, add green material.
- A healthy compost will have a pleasant odor, give off heat as vapor when turned, have a white fungal growth on the decomposing material, will get smaller each day, and change color to dark brown. Compost is ready when no further heat is produced.

Source: UC IPM ([ipm.ucanr.edu/PMG/GARDEN/FRUIT/ENVIRON/composting.html](http://ipm.ucanr.edu/PMG/GARDEN/FRUIT/ENVIRON/composting.html))

Read more about composting at [uccemg.com/files/78738.pdf](http://uccemg.com/files/78738.pdf) and [calrecycle.ca.gov/Organics/Products/Quality/Needs.htm](http://calrecycle.ca.gov/Organics/Products/Quality/Needs.htm)