

CHECK GREENHOUSE FURNACES

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Most bedding plant growers in Connecticut heat their greenhouses with oil-fired, hot air furnaces. After the plant season these furnaces are not run again until fall or winter. They may be stored in barns, wrapped in plastic or exposed to the weather if the house is open. In the fall they are cleaned, a new nozzle installed, and made ready for use. But, how well are they cleaned and checked?

During the past few years there has been a lot of plant damage due to faulty furnaces. Injury has appeared due to ethylene and sulfur dioxide.

Growers can check furnaces for leaks with the use of furnace candles (Figure 1). These candles look like 2" firecrackers. When lit, they burn for

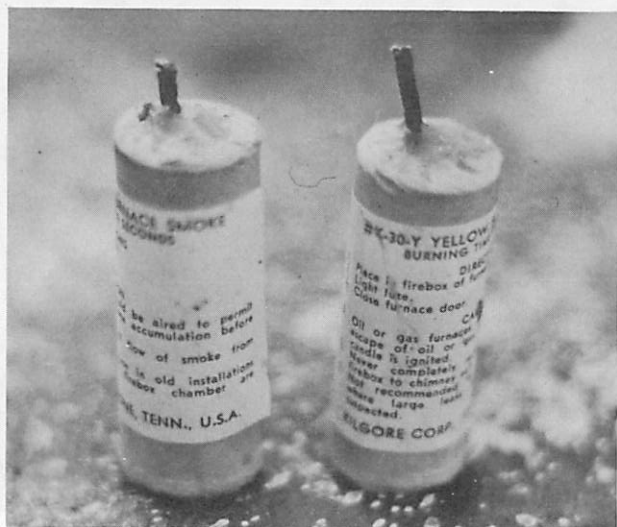


Figure 1--Candles for testing furnace leaks.

about one minute and give off yellow smoke. This can be seen quite readily from cracks or poor fitting chimney joints (Figure 2).

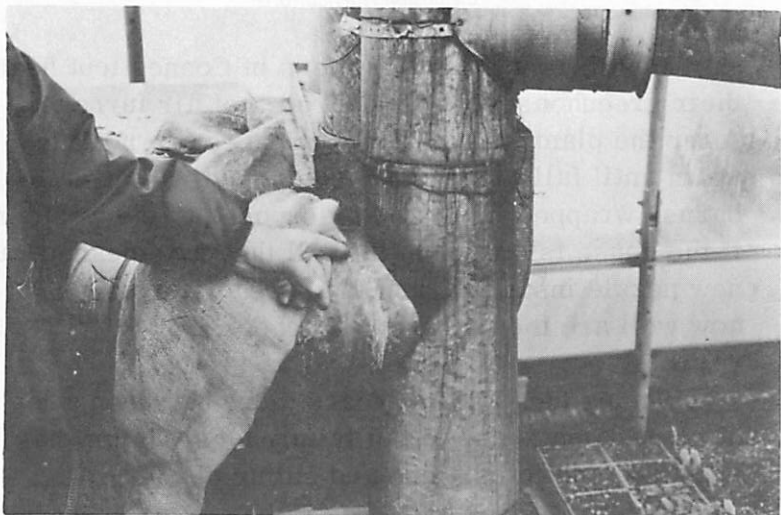


Figure 2--A leaky furnace stack can cause plant damage.

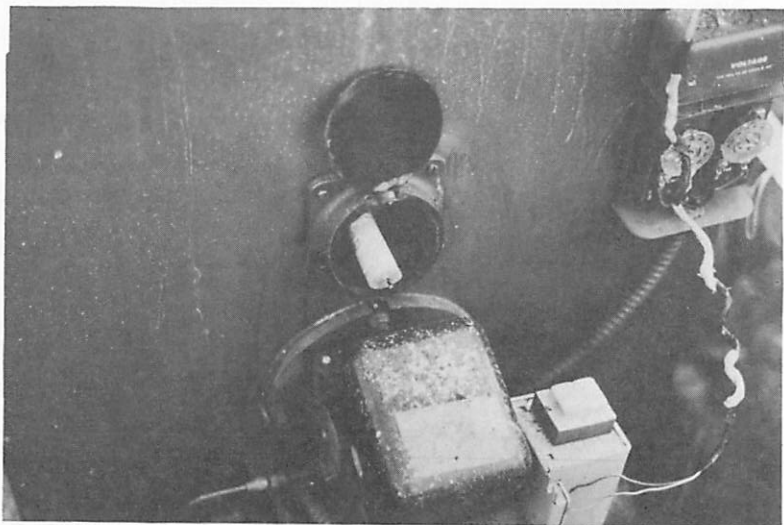


Figure 3--Light the furnace candle and place it in the firebox.

Check the furnace in the following manner. Shut off the furnace and cover the draft damper inlet, if any. Light the candle and drop it into the fire box (Figure 3). After 30 seconds, look for the yellow smoke. If none, turn on the circulating fan. If there is no yellow smoke visible, then fire up the furnace. Occasionally, delayed ignition will cause fumes to be pushed back into the greenhouse. While this may only be a small amount at any one time, it could accumulate in a closed greenhouse overnight.

One other cause of fumes being pushed into the greenhouse is a back-draft. This may occur more often on furnaces with short chimneys (Figure 4). The stack should extend at least two feet over the top of the ridge.

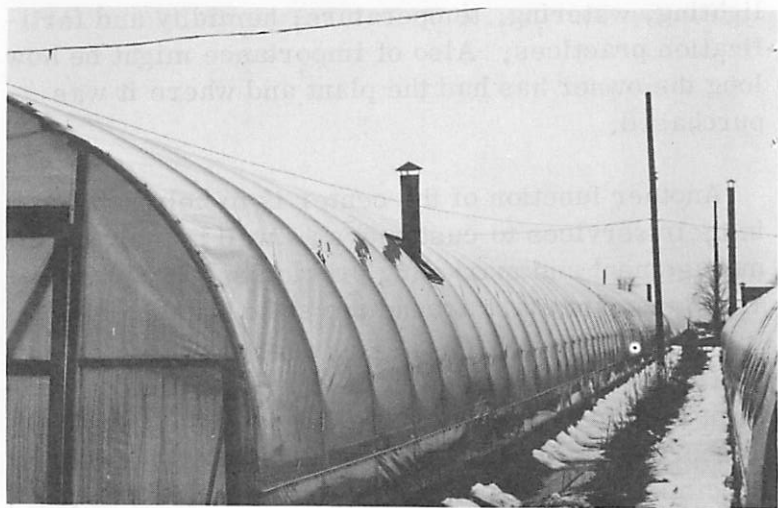


Figure 4--A furnace stack that is too short may cause back-drafts.

THE UCONN CONSUMER HORTICULTURE CENTER

On May 24, 1976 the Consumer Horticulture Center began operation. Anyone with a "sick" plant may bring it to the center for immediate diagnosis. If the plant is too large, such as a maple tree, some of the affected parts may be brought or sent in.

If sending in specimens, the consumer should include information on what part of the plant the specimens came from, if the plant was growing outside, the location of the plant in relation to its surroundings, the type of soil it was growing in, the type of fertilizer used, how often it was watered, etc.

For house plants, the information needed includes lighting, watering, temperature, humidity and fertilization practices. Also of importance might be how long the owner has had the plant and where it was purchased.

Another function of the center is to help retailers in their services to customers as well as solving management and marketing problems. Programs are planned to start around the state this spring.

The center is located in the Plant Science Department in the College of Agriculture and Natural Resources at the University of Connecticut in Storrs. Specimens to be diagnosed may be sent by mail to Consumer Horticulture Center, U-67, University of Connecticut, Storrs, Conn. 06268.

For consumer problems (house plants, trees, etc.) contact Edmond Marrotte. Retailers should contact Edwin D. Carpenter.