HERBICIDE RESIDUES IN SOILS

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Each year the greenhouse operator is faced with having to obtain soil. He may strip it off his own land or he may buy it. Most growers in Connecticut fall into this latter category.

"Top" soil, if bought in, is an unknown quantity. The seller guarantees it is "great"; that seeds will leap out of the ground when planted in it, and cuttings will produce plants "the likes of which have never been seen before." All this goes with the $5.00-$8.00/cubic yard fee.

Other than color and texture, very little can be told about topsoil unless some tests are made.

If you are suspicious about the source of topsoil, then do the following: (1) get a sample and send it to UConn for an analysis, and (2) plant some oats to check for herbicide residue.

Mix thoroughly 1 tablespoon of activated charcoal per flat of soil. Leave 1 flat of soil plain (without charcoal). Plant some oats, 10-50 seeds depending on size of flat with the germ end down. Water and observe the growth. After the oats are up, reduce watering to induce stress on the plant. If both flats of oats look the same after 14 days, then you can be reasonably sure that herbicides are not present. If, however, the oats in the soil without charcoal become yellow and the tips turn gray,

then suspect an herbicide. It would be wise not to use this soil. For a more complete test, divide the flat and sow tomato seeds in half of it.

Fortunately, insects and diseases can be controlled by soil treatments with steam or chemicals. Herbicide residues present a different problem.