

ANALYTICAL RESEARCH DIVISION
RESEARCH DIRECTORATE

5 Sep 84

Analysis/Evaluation of Control Leaf With
Yellow Spots

A shipment designated 10027 M (4), also identified with LA 831024-3WT was received by the Analytical Research Division, 22 November 1983 from FSTC. Information concerning the sample indicated it was a control sample yellow spotted leaf, fig 1, containerized in a plastic bag.

A vapor sample withdrawn from within the plastic bag was subjected to analysis by gas chromatography/mass spectrometry (GC/MS). A portion of the spots were extracted with chloroform. Another portion of the spots were extracted with 1:1 methanol:water. The solvent soluble materials were analyzed by GC/MS, ion chromatography, (IC) thin layer chromatography (TLC) and infrared spectrometry (IR).

The GC/MS spectra of the vapor associated with the leaf identified the presence of toluene, ethyl benzene and benzaldehyde. The GC/MS spectra of the chloroform solubles detected aliphatic hydrocarbons from C₂₅ through C₂₉ and diethylphthalate. Ion chromatography was negative for all ions of interest. No detectable components were separated by TLC. Derivatization with MS detection was negative for trichothecenes. IR spectra identified the presence of aliphatic hydrocarbons, C-O and cellulose.

Conclusion:

No evidence of any known CW agent, agent degradation product or trichothecene was detected. The phthalates detected were probably from the plastic bag used for packaging. The sample appears to be innocuous and as such an excellent reference material.

Classified by: CIA

Declassify: OADR



10027 M M M M

