

ANALYTICAL RESEARCH DIVISION  
RESEARCH DIRECTORATE

21 August 1984

Analysis/Evaluation of Leaves

b3  
A shipment designated 10027TTT, identified with Registry No. C-082-83, was received by the Analytical Research Division 6 April 1983 from FSTC. There was no information available concerning the sample. The sample consisted of a bundle of broad leaves having yellow and white spots, figure 1. The leaves had been packaged in a plastic bag, tied with string, [REDACTED]

A vapor sample withdrawn from within the plastic bag was subjected to analysis by gas chromatography/mass spectrometry (GC/MS). A portion of the leaves was leached in chloroform. Another portion was leached in 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 vegetation was not definitive, indicative of minimal volatiles. The GC/MS spectra of the chloroform solubles identified the presence of pentadiene, with an additional broad peak similar to an acid having a molecular weight of 254. IC separated no ions of interest. No separation of components was obtained by TLC. Derivatization with negative ion chemical ionization MS detection for trichothecenes was negative. IR spectra identified the presence of water, aliphatic hydrocarbons, a trace carbonyl band at  $1735\text{ cm}^{-1}$ , and possible inorganic silicates.

Conclusion:

No evidence of any known CW agent, agent degradation product or trichothecene was detected. No components indicative of anything beyond natural vegetation were detected. The sample appears to be innocuous.

Classified by CIA  
[REDACTED]



10027TTT [1

Figure 1

