- 3. Did you see animals drink water after the attack? What happened?
- 4. Did the water have any abnormal color/odor?

## 3.0 Are Mycotoxins Chemical or Biological Agents?

Introduction. The 1925 protocol for the "Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases" , known as the 1925 Geneva Protocol, was meant mainly for chemical weapons and has no verification provision. The 1972 "Biological Treaty" includes a consultation, cooperation and complaint mechanism.

Ambiguity of Existing Treaties. Usually, chemical agents are thought of as synthetic chemicals, whereas biological warfare agents are thought of as living organisms that cause disease and/or death due to the reproduction and spread of organisms. Toxins produced by living organisms occupy a vacuum between treaties on chemical and biological warfare, because the toxins cannot reproduce.

According to Seagrave<sup>2)</sup>, the Soviet Union considers toxins to be chemicals rather than biologicals, because they are secretions or products of living organisms.

Mycotoxins and "Yellow Rain". Mycotoxins are chemicals produced by living organisms, thus they would have to be classified as chemicals, unless one chooses to introduce a new category, the "biotoxins". As far as "Yellow Rain" is concerned, there is a possibility that the so-called "Yellow Rain" contains both mycotoxins (=chemicals) and living spores of fungi. Conclusive studies are not available yet on this subject; however, should it be possible to prove that samples of "Yellow Rain" contain both mycotoxins and fungal elements and/or spores, the use of "Yellow Rain" would be covered by both treaties.

l) League of Nations, Treaty Series XCIV, N. 2138, p. 65, 1929.

<sup>2)</sup> Seagrave, S. p. 196, Yellow Rain; A Journey Through the Terror of Chemical Warfare. M. Evans & Co., New York, 1981.