



UNITED NATIONS
GENERAL
ASSEMBLY



Distr.
GENERAL

A/36/509
15 September 1981

ORIGINAL: ENGLISH

Thirty-sixth session
Item 42 of the provisional agenda*

CHEMICAL AND BACTERIOLOGICAL (BIOLOGICAL) WEAPONS

Note verbale dated 14 September 1981 from the Permanent Representative of the United States of America to the United Nations addressed to the Secretary-General

The Permanent Representative of the United States of America presents her compliments to the Secretary-General of the United Nations and has the honour to inform him that the United States has obtained significant new information pertaining to the use of lethal chemical weapons in the conflicts in Laos, Kampuchea and Afghanistan. In accordance with resolution 35/144 C, the United States therefore requests that this information be provided to the United Nations Group of Experts to Investigate Reports on the Alleged Use of Chemical Weapons.

For several years, the United States has been concerned about reports that lethal and incapacitating chemical weapons are being used in the conflicts in Laos and Kampuchea and, since the Soviet invasion in December 1979, in Afghanistan. As a result of this concern, the United States has actively endeavoured, as have other concerned members of the international community, to obtain information which might enable us to ascertain the facts pertaining to these reports.

Since 1979, the United States has been reviewing and carefully analysing information and evidence obtained relating to alleged chemical attacks in these regions. We now believe we have information which will answer some of the questions raised by the reports.

Many of the reports contained in the United States submission of 27 March 1981 to the Secretary-General describe attacks in which planes or helicopters have flown over an area and dispersed a cloud which settled to the ground, causing people in the immediate area to become gravely ill or die. The attacks normally occurred on clear days, after any morning mist or ground fog had lifted; attacks typically have not been reported to have occurred during the rainy season.

* A/36/150.

Reports about exposure to the cloud describe bizarre effects which, in rapid sequence, caused dizziness, nausea, coughing of blood-tinged material, choking, vomiting of massive amounts of blood, bloody diarrhea, formation of multiple small hard blisters, followed by shock and death in those directly under the sprays. For those on the periphery of the attacks or who ate or drank contaminated food, or water, symptoms took longer to develop (days, rather than minutes to hours) and usually led to death within two weeks if no treatment were given.

Over the past several years, a number of medical doctors concerned about this problem have travelled to South-East Asia to obtain information. They have visited the borders in question, interviewed and examined refugees, reviewed medical records and public health data and have spoken directly with eyewitnesses to incidents in both Laos and Kampuchea. Members of the United States Congress who are deeply concerned about this problem have visited the region to learn more about the reports as well. Whether they were medical doctors, concerned legislators, private citizens, refugee centre personnel or journalists, those who have actually interviewed eyewitnesses and victims of chemical attacks believe the accounts they were told are the truth.

United States experts have studied and evaluated the symptoms described in these reports in an effort to form a judgement about what agent or agents might have caused such effects. The conclusion reached was that no known traditional chemical warfare agent alone or in combination with others could produce all of the symptoms described or cause death to occur as rapidly as has been reported.

Recent analysis of a leaf and stem sample from the area of a reported chemical attack in Kampuchea has revealed the presence of substances which are not traditional chemical warfare agents, but which cause the specific symptoms and effects which have been described. Specifically, tests on the sample identified abnormally high levels of three potent mycotoxins of the trichothecene group: nivalenol, deoxynivalenol, and T-2 toxin. Levels of deoxynivalenol and nivalenol detected were up to 20 times greater than that reported to occur as a result of natural intoxication. A report on the tests is annexed to this letter.

Symptoms associated with trichothecene poisoning include the rapid onset of vomiting, multiple hemorrhaging of mucous membranes, bloody diarrhea and severe itching or tingling of the skin with formation of multiple small hard blisters. All of the trichothecenes produce similar symptoms; however, there are some differences in the degree of severity: nivalenol and deoxynivalenol produce fewer skin irritative effects than T-2; nivalenol is a slightly stronger hemorrhagic than either deoxynivalenol or T-2; deoxynivalenol (also known as vomitoxin) causes very severe vomiting.

Trichothecenes are naturally produced by fusarium fungi and do not occur naturally in warm climates. They are chemically quite stable and can easily be produced in large quantities by those with the proper technological capability. The facilities needed to produce mycotoxins are similar to those which produce pharmaceutical grade antibiotics. We have no evidence that such facilities exist

in South-East Asia in sufficient numbers or sizes to produce the quantities of mycotoxins or "yellow powder" which have reportedly been used in the region.

The United States believes that, in the light of this new information, increased effort must be made to visit the regions where chemical attacks are being reported. The United States urges the group of experts to take steps immediately to visit refugee camps and the areas of reported attacks in the regions in question to obtain testimony first hand from eyewitnesses and victims of attacks, medical personnel and officials of refugee organizations and any other evidence available. In addition, the utmost effort should be made to contact and obtain testimony from the many victims and eyewitnesses who have departed from the refugee camps and started new lives elsewhere.

The United States will continue to co-operate fully with the Secretary-General and the Group of Experts and will do its utmost to provide any further appropriate assistance which might facilitate their task.

The Permanent Representative of the United States of America requests that this note and its annex be circulated as an official document of the General Assembly under item 42 of the provisional agenda.

ANNEX
SAMPLE ANALYSIS REPORT

Chemical analysis of a leaf and stem sample obtained near the Thai/Kampuchea border, from an area of a reported chemical attack in Kampuchea, has revealed the presence of abnormally high levels of trichothecene toxins.

The sample from Kampuchea (coded Sample A), a positive control sample to which T2 toxin had been added (coded Sample B), and a negative control sample (coded Sample C) were forwarded to a leading mycotoxin detection expert for analysis. The researcher was given no information concerning the origin or content of the samples, but was requested to analyze the three unknowns, labeled only A, B and C, for the presence of trichothecene toxins.

The method of analysis was a ferric gel procedure followed by selected ion monitoring on computerized gas chromatograph/mass spectrometer (Hewlett-Packard 5985B).

No trichothecenes were detected in the negative control sample (Sample C). T2 toxin was correctly detected in the spiked positive control sample (Sample B). Sample from area of reported chemical attack in Kampuchea (Sample A) was found to contain nivalenol, deoxynivalenol, and T2 toxin.

These three compounds are potent mycotoxins of the trichothecene group. Levels of deoxynivalenol and nivalenol detected were up to twenty times greater than that reported to occur when vegetation is naturally contaminated by trichothecene toxins. According to the mycotoxin expert, such high levels are extremely unlikely to occur as a result of natural intoxication.

Symptoms associated with trichothecene poisoning include rapid onset of vomiting, multiple hemorrhage of mucous membranes, bloody diarrhea, and severe itching or tingling of skin with formation of multiple small hard blisters. All of the trichothecenes produce similar symptoms; however, there are some differences in the degree of severity: nivalenol and deoxynivalenol have fewer skin irritative effects than T2; nivalenol is a slightly stronger hemorrhagic; deoxynivalenol (also known as vomitoxin) causes very severe vomiting.