



Government of Canada
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MEMORANDUM

NOTE DE SERVICE

TO
A

External Affairs.

FROM
DEPeter Scott,
Health and Welfare Canada.

SECURITY - CLASSIFICATION - DE SECURITE
OUR FILE/NOTRE REFERENCE
YOUR FILE/VOTRE REFERENCE
DATE July 30, 1982.

SUBJECT
OBJET 3.1 Search for Trichothecenes in Blood Samples from S.E. Asia.

Plasma from 5 blood samples - Kai Lor, Sang Pao Mova, Lor Xiong, Lee Pao Xiong, and Vang Mai - were extracted and heptafluoro butyrate derivatives formed. They were screened by gas chromatography with electron capture detection for nivalenol, nivalenol 4-acetate (fusarenone X), deoxynivalenol, deoxynivalenol 3-acetate, neosolaniol, T-2 toxin and HT-2 toxin. No deoxynivalenol, neosolaniol or T-2 toxin were detected. Peaks corresponding in retention time to fusarenone-X, deoxynivalenol 3-acetate, and nivalenol were detected, the last 2 barely distinguishable from background. In 3 samples - Kai Lor, Lor Xiong and Lee Pao Xiong - a peak corresponding to HT-2 toxin, again barely distinguishable from background, was seen. HT-2 toxin could not be confirmed by capillary gas chromatography - mass spectrometry (detection limit 5 ppb); nor were deoxynivalenol or nivalenol detected on screening by this procedure. In view of the absence of deoxynivalenol and nivalenol, the presence of their acetates is unlikely in blood. However, the question of whether nivalenol 4-acetate (fusarenone-X) or an interference is present in the blood samples should be checked by us later.

Conclusion: the presence of trichothecenes in the 5 blood samples has not been established.

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