aluminium oxide 90 (70-230 m; Merck, Darmstadt, FRG) were mixed and columns of approximately 100 mg of the mixture were prepared in Pasteur pipettes. The columns were pre-washed by passing 0.5 ml CH_2Cl_2, followed by 0.5 ml MeOH. To speed up the process, a slight positive pressure was applied.

Each residue from the preceding clean-up step on the silica gel column was taken up in approximately 0.5 ml CH_2Cl_2 and passed through the column, which was then rinsed with 0.5 ml MeOH. The combined filtrates were stored at -5°C until required for analysis, at which time they were reduced to dryness under a stream of nitrogen at 40°C.

A second clean-up step was introduced for blood samples received from the field since, during the initial phase when the samples were centrifuged prior to storage (see section 3.2.2), conditions of hemolysis, icterus and elevated amounts of lipids were found to exist in some cases (see Appendix Z). For the execution of the analysis, it was necessary that these contaminants, as well as any other constituents present in abnormally large amounts, be removed as their presence were found to result in a significant loss of sensitivity and resolution when injected on the GC column. Although this second clean-up step undoubtedly reduced the recovery levels of the mycotoxins, it greatly alleviated the problem of GC