P G05 OPTIMIZATION PROCEDURES IN TLC SEPARATION AND QUANTITATIVE DETERMINATION OF ALOIN IN HERBAL DRUGS AND IN HUMAN FAECES

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When considering the improvements in TLC techniques , as e.g. the optimization in selectivity and flow velocity of the mobile phase the chromatographic separation leadsto a maximum of theoretical plates.These facts are described by the Van Deemter equation (1).The DESAGA H-chamber (2) enables the analyst to perform chromatographic separations utilizing optimal flow velocity of the mobile phase and short development distances (3-4 cm).
The objective of this poster is to represent TLC as a very efficient method for qualitative and quantitative "in situ" determination of aloin in herbal drugs and in human faeces when employing planar TLC by optimizing the mobile phase velocity of the solvent recommended by the German Pharmacopoeia 9.

(1) J.J.Van Deemter et al. ,Chem.Eng.Sci.5:271 (1956)
(2) Lj.Kraus, Kl.Praktikumsbuch der DC,DESAGA-Heidelberg,3.Aufl.(1990)

P G06 REVISION OF THE STRUCTURE OF STRYCHNOFLUORINE

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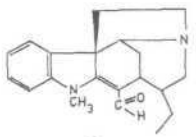
Strychnofluorine is a minor indolinic alkaloid isolated in 1980 from *Strychnos gossweileri* (1). Its structure **1** was based on some spectral data (mainly UV, IR, low resolution ^{1}H NMR and MS). From a new batch of *S. gossweileri*, further amounts of strychnofluorine were obtained by MPLC. High resolution ^{1}H and ^{13}C NMR spectra did not confirm all the previous deductions. Extensive 2D-NMR experiments (COSY, X-HCorr and NOESY) were then carried out. The observed connectivities show that strychnofluorine is identical to 18-hydroxy-norfluorocurarine **2** . This substance has only been isolated later from *S. ngouniensis* (2), but the NMR data were not provided. A TLC co-chromatography with reference compound has shown that both products are identical. The comparison with CD, ^{1}H and ^{13}C NMR data of fluorocurarine (3) is now possible.



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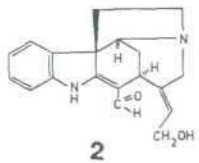

2

(1) C. Coune and L. Angenot, Herba Hungarica, 19,189 (1980)
(2) G. Massiot *et al.*, Phytochemistry, 39, 3645 (1983)
(3) M. Caprasse *et al.*, J. Pharm. Belg., 36, 243 (1981).