

LETTERS TO THE EDITOR

record at this stage. Our detailed results will be submitted shortly for publication in your Journal.*

It is a pleasure to acknowledge the encouragement of the Directors of The British Drug Houses, Ltd., in this work.

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The "Ninhydrin-Reacting" Hydrolytic Fragment of Vitamin B₁₂

SIR,—We have previously reported¹ that hydrolysis of vitamin B₁₂ with 20 per cent. hydrochloric acid at 100°C. for 6 hours followed by examination of the hydrolysate by unidimensional paper-strip chromatography, reveals the presence of *one* "ninhydrin-reacting" substance which could not be identified with any of the known amino-acids. Our studies have hitherto been handicapped by incomplete separation on paper chromatograms of the "ninhydrin-reacting" fragment from other products of vitamin B₁₂ hydrolysis. By using *n*-butyl alcohol-acetic acid as the irrigation solvent, however, complete separation has now been obtained. The "ninhydrin-reacting" area occupies a position well removed from zones which fluoresce under the light of a low-pressure mercury resonance lamp fitted with a Corning 9863 glass filter², and which form the subject of a separate communication (*vide infra*). Elution of the "ninhydrin-reacting" area with dilute hydrochloric acid gives a solution transparent to ultra-violet light. From this and other observations we concluded that the "ninhydrin-reacting" substance was probably an aliphatic base.

We now find that the "ninhydrin-reacting" substance and 2-aminopropanol show identical behaviour on paper chromatograms irrigated with four different solvent systems. The two substances thus have the same partition coefficients in each of these solvent systems, and it is therefore reasonable to conclude that they are identical. A final decision, however, must rest on a direct chemical comparison. Full details of this work have already been submitted for publication³.

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REFERENCES

1. Ellis, Petrow and Snook, *J. Pharm., Pharmacol.*, 1949, **1**, 60.
2. Holiday and Johnson, *Nature*, 1949, **163**, 216.
3. Ellis, Petrow and Snook, *J. Pharm. Pharmacol.*, in the press.