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A NEW SALMONELLA TYPE (*S. USUMBURA*) FROM THE BELGIAN CONGO

By

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From the water of Lac Tanganyika a new *Salmonella* type was isolated which has the following biochemical behaviour: No fermentation of adonitol, inositol, lactose, salicin, and sucrose. No production of indole, no liquefaction of gelatin (60 days at 20°C.), and no decomposition of urea. Rapid fermentation of arabinose, dulcitol, glucose (with gas), maltose, mannitol (with gas), rhamnose, sorbitol, trehalose, and xylose. Positive reaction in *Stern's* glycerolfuchsin broth, formation of H₂S. Positive reaction in liquid ammonium media containing glucose and sodium citrate. Positive reaction in d-tartrate, mucate, or sodium citrate after 1 day, negative reaction in i-tartrate after 14 days. Nitrates were reduced, the *Voges-Proskauer* reaction was negative, and the methyl-red reaction positive.

Serologically the type has the formula XVIII: d: 1,7. Cross-absorption showed that the O antigen is identical with the O antigen of *S. cerro*.

The H antigen of phase 1 (d) is identical with the H antigen of *S. gaminara*, phase 1, but the H antigen of phase 2 (1,7) is not identical with the H antigen 1,7 of *S. gaminara* as this type and some other types contain a special factor in phase 2, not expressed in the formula 1,7. The H serum of *S. usumbura*, phase 2, was absorbed completely by *S. gaminara*, phase 2. Cross-absorption showed that the H antigen of *S. usumbura*, phase 2, is identical with the H antigen of *S. bredeney*, phase 2.

SUMMARY

The authors describe a new *Salmonella* type: *Salmonella usumbura* = XVIII: d: 1,7, isolated from the water of Lac Tanganyika.