A HITHERTO UNDESCRIBED SALMONELLA SEROTYPE:
S. HENNEPIN

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SUMMARY. A new Salmonella serotype 41:d:z₆ was described and the designation of S. hen-nepin was assigned to it. The culture was isolated from the liver of a green lizard (Crotaphytus collaris) in Minnesota.

The Salmonella serotype to be described, Salmonella hen-nepin (strain 137/65), was isolated from the liver of a green lizard (Crotaphytus collaris) in Hennepin County, Minnesota by Dr. Donald Barnes, Veterinary Diagnostic Laboratory, University of Minnesota. This lizard is not a native of Minnesota, but is found in Missouri and in areas with latitudes similar to that of Missouri. There were eight lizards in the group. Of these four were ill and two died.

The biochemical reactions given by strain 137/65 indicated that it was a motile member of the genus Salmonella. In the terminology of Kauffmann (1960, 1963), the strain would be classified as a member of subgenus II. Indol was not produced, the methyl-red reaction was positive and the Voges-Proskauer test was negative. There was rapid growth on Simmons' citrate agar, hydrogen sulfide was produced and nitrate was reduced to nitrite. Urease and phenylalanine deaminase were not produced. Kohn's gelatin was liquefied after 4 days. Lysine and ornithine decarboxylases, as well as arginine dihydrolase, were produced.

When tested according to the method of Kauffmann and Petersen (1956), mucate and malonate were utilized in 1 day, sodium citrate was catabolized in 2 days, D-tartrate was utilized after 14 days and l- and I- tartrates were not attacked. The strain failed to grow in KCN medium, and tests for β -galactosidase activity (ONPG, method of LeMinor and Ben Hamida, 1962) were negative. Acid and gas were produced from glucose, maltose, mannitol, dulcitol, rhamnose,

arabinose, xylose, sorbitol and trehalose within 24 hours. Glycerol was fermented in 48 hours, and cellobiose was fermented with gas production in 7 days. Lactose, sucrose, salicin, inositol, raffinose and adonitol were not attacked.

Strain 137/65 belonged to Salmonella O group 41. It was agglutinated to titer of S. waycross O serum (41) and, in absorption tests, removed all agglutinins from that serum.

The flagellar (H) antigens of strain 137/65 were diphasic. The phase 1 antigen was agglutinated to the titer of S. typhi H(d) serum and in absorption tests reduced the titer of that serum from 1:6400 to 1:1600. The phase 2 antigen was agglutinated to the titer of S. kentucky phase 2H(z₆) serum and in absorption tests reduced the titer of the z₆ serum from 1:6400 to 1:800.

Strain 137/65 was designated as the standard (or reference) strain of a new serotype with the antigenic formula 41:d:z₆ and the name Salmonella hennepin was assigned to it.

REFERENCES

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