A NEW SALMONELLA TYPE: *S. LAWNDALE*

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SUMMARY: A new Salmonella serotype, (9,12:z-1,5) S. lawndale, is described. It is indol positive and was isolated from a case of enteric infection in a human.

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The new serotype to be described was received for confirmation from the Illinois Department of Public Health. It was isolated by Dr. William I. Metzger at Cook County Hospital, Chicago, from the stool of a three-month-old negro female with acute gastroenteritis.

The culture produced indol, was methyl-red positive, Voges-Proskauer negative, grew readily in Simmons' citrate medium, and produced hydrogen sulfide, but failed to hydrolyze urea or to liquefy gelatin. The lysine and ornithine decarboxylase tests and the arginine dihydrolase test were positive. When tested by the method of Kauffmann and Petersen (1956), D-tartrate and L-tartrate were utilized properly but I-tartrate, mucate and citrate were not attacked. Malonate was not utilized. The culture promptly produced acid and gas from glucose, arabinose, rhamnose, xylose, maltose, sorbitol, trehalose, mannitol and dulcitol and acid from glycerol; acid was produced from cellobiose after 4 days incubation. Lactose, sucrose, salicin, adonitol, inositol, and raffinose were not attacked.

S. lawndale was a member of Salmonella group D and in absorption tests removed all agglutinins from Salmonella gallinarum O (9,12) serum. The H antigens were diphasic and phase 1 agglutinated to the titer of Salmonella poona phase 1 (z) serum and in absorption tests removed all agglutinins from the serum. Phase 2 was agglutinated by Salmonella thompson phase 2 (1,5) serum. It was readily agglutinated by single factor 5 serum but not by sera for factors

2, 6, 7 and z₆. In absorption tests it reduced the titer of S. thompson phase 2 serum from 1-10,000 to 1-100. S. lawndale was assigned the antigenic formula 9, 12: z-1, 5.

REFERENCES

- Moeller, V. 1955. Simplified tests for some amino acid decarboxylases and for the arginine dihydrolase system. Acta Path. et Microbiol. Scand., 36:158.
- Kauffmann, F. and A. Petersen. 1956. The biochemical group and type differentiation of Enterobacteriaceae by organic acids. Acta Path. et Microbiol. Scand. 38:481-491.