A NEW SALMONELLA SEROTYPE:
SALMONELLA SP. SER. RECHOVOT = (8), 20:e, h:z₆

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ABSTRACT. A new Salmonella sp. (serotype)—S. rehovot—was isolated from the floor of a slaughter house. Its antigenic structure is (8), 20:e, h:z₆.

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A new Salmonella species was isolated from the blood basin and the floor of a slaughter house in Rechovot.

The biochemical behaviour of the culture was as follows: No fermentation of adonitol, inositol, lactose, salicin, sucrose and raffinose. The β -galactosidase test was negative. Rapid fermentation of arabinose, dulcitol, glucose (with gas), maltose, mannitol (with gas), sorbitol, rhamnose, trehalose and xylose. Urea was not decomposed, indol was not produced and gelatin was not liquefied (Kohn-Lautrop's method). The reaction in phenylalanine medium was negative. Positive reaction in Stern's glycerol fuchsin broth and formation of H₂S. It grew on Simmon's citrate agar, nitrates were reduced, the Voges-Proskauer reaction was negative and the methyl red reaction was positive. Positive reaction in d-tartrate, l-tartrate, citrate and mucate, negative reaction in i-tartrate and malonate. No growth was obtained in KCN medium. The culture produced lysine, arginine (2 days) and ornithine decarboxylase, but no glutamic acid decarboxylase.

The antigenic formula of the new type was found to be: (8), 20:e, h:z₆. The O antigens of S. rehovot were found to be identical with the O antigens of S. kentucky. By cross absorption it could be demonstrated that all the O agglutinins from the S. kentucky O serum were absorbed by S. rehovot and all the O agglutinins from the S. rehovot O serum were absorbed by S. kentucky. The O serum of S. rehovot, after absorption with S. virginia (O₈), or S. newport (O_{6,8}) contained only the O₂₀ agglutinins. The H antigen of S. rehovot

phase 1(e,h) was found, by cross absorption, to be identical with the e,h antigen of S. mara and the H antigen phase 2(z₆) with the z₆ antigen of S. kentucky.

The antigenic structure of S. rehovot has been confirmed by Dr. R. Rohde, Hygienisches Institut, Hamburg, and Dr. Le Minor, Chief, International Salmonella Centre, Paris.