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

I. Sechter, C. Imre, Ch. B. Gerichter and S. Toma

Government Central Laboratories, Salmonella Centre
of Israel, Jerusalem and Public Health Laboratory
Abu Kabir, Tel Aviv, Ministry of Health, Israel

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

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, su-
crose and raffinose. The β-galactosidase test was negative.
Rapid fermentation of arabinose, dulcitol, glucose (with
gas), maltose, mannitol (with gas), sorbitol, rhamnose, tre-
halose 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 nega-
tive. 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 re-
action 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 de-
carboxylase.

The antigenic formula of the new type was found to be:
(8), 20:e, h:z6. The O antigens of S. rechovot 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. rechovot
and all the O agglutinins from the S. rechovot O serum were
absorbed by S. kentucky. The O serum of S. rechovot, after
absorption with S. virginia (O9), or S. newport (O6,8) con-
tained only the O20 agglutinins. The H antigen of S. rechovot
phase £(e, h) was found, by cross absorption, to be identical with the e, h antigen of \textit{S. mara} and the H antigen phase 2\((z_6)\) with the \(z_6\) antigen of \textit{S. kentucky}.

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