Salmonella Species - Erstfunde, Namen und Vorkommen
(First Isolations, Names and Occurrence).

By E. Kelterhorn, S. Hirzel Verlag, Leipzig. 55 M.
(about $14.00) 535 pp. 1967. (English Translation by
H. Liebscher and Revision by J. H. McCoy.)

The German introduction of 12 pages (followed by an
English translation) contains an interesting historical ac-
count. There is no recognition of the refusal of the Inter-
national Subcommittee of the International Committee on
Nomenclature of the Enterobacteriaceae to approve Dr.
Kauffmann's proposal that each verified serotype be recog-
nized as a species. The Kauffmann designation as species
is often used by epidemiologists, but not in general by bac-
teriologists who use the older classical names and are en-
gaged in studies relating to physiology, morphology and
biochemistry.

An interesting list of twenty sources of terms used as
specific epithets (practically all nouns in apposition with the
generic name), occasionally nouns in the genitive or adjec-
tives, is compiled. It is noted that of the 1043 species listed
in the Kauffmann-White schema, 70.1% were isolated from
man, 33.8% from man only, and 22.6% from animals only.
An analysis of data from over 500,000 isolations revealed
96.7% belonged to 47 serotypes.

The second section of 377 pages lists the first isolations,
names and occurrence of the 1043 species of the Kauffmann-
White schema under sources of isolation and with 9 sub-
headings.

Section Three (15 pages) includes descriptions of 52 spe-
cies whose names are not accepted in the Kauffmann-White
schema as presented. The reasons for nonacceptance are
detailed.

The fourth section of 32 pages is a complete tabulation
of the 1053 (?) species separated into 46 groups variously
labeled by letters, letters with subscripts and numbers. For
each species there are enumerated, the O-antigens, the H-
antgens with phase 1 and phase 2, 9 classes of origins, with
totals.

The list of references (with many personal communica-
tions) is included in 35 pages with an estimated 1100 entries, all fully documented.

A novel and interesting Section six reproduces the title pages of "classic" articles in the genus Salmonella from Eberth (1880) to Kauffmann (1934).

The index is quite adequate.

The author has collected and well annotated an amazing amount of information relative to the names applied to the accepted species of the Kauffmann-White schema. The Kel-terborn volume should find wide acceptance by epidemiologists for its clarity and encyclopedic coverage from the first recognition of Salmonella to its date of publication.

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The author notes the need for recognition of the advances that have been made in systematic bacteriology since the publication of Bergey's Manual of Determinative Bacteriology, Edition 7, in 1957. The following statement from the Preface to the Second Edition indicates the scope:

"The key to the genera of bacteria has been compiled with the aim of placing in the hands of research workers, teachers and students a volume in which general directives for the identification of the genera of bacteria are supported by a complete list of the methods needed for the purpose."

The volume has five sections and a well organized and comprehensive index. A preliminary chapter is devoted to a straightforward discussion of numerical taxonomy with the heading "Elements of a numerical analysis." The author states:

"It is my intention here to give only a brief but operative outline of the procedures and to emphasize the importance of some of these aspects to the future of systematics."

The special nomenclature of systematics of numerical taxonomy are well developed and outlined. Conventional methods in systematic bacteriology have thus far yielded relatively satisfactory results, which have usually been confirmed by numerical analysis. However, it is emphasized that the conventional methods can no longer deal adequately with the mass handling of cultures.